Brudenell Lyndoch and Raglan

Submission to Township of Brudenell, Lyndoch, and Raglan

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Project No. 23502

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

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Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Brudenell Fire Hall #4

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Brudenell Fire Hall #4 building, located at 8020 Opeongo Rd, Palmer Rapids, ON, was reportedly constructed in 1992. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 126 SM (1364 SF). The Building Assessment was undertaken on May 19, 2023.

Facility No	BFH
Name	Brudenell Fire Hall #4
Address	8020 Opeongo Rd - Palmer Rapids - ON - Canada
Area	1364 SM
Floors	1
Year Constructed	1992
Condition Assessment Date	April 05, 2023
Replacement value	$757,476.92
3 Year FCI	0.9%

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1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Brudenell Fire Hall #4, located at 8020 Opeongo Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on April 05, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan. The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A101001 - Standard Foundations - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	45 / LM Footprint
Unit Cost	$1,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$89,414.02

Description
Based on the information gathered during the assessment, the foundations are standard shallow foundations bearing on good native soil. Due to the hidden nature of the building's foundations, a visual site confirmation of the foundation type was not possible.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Element Description	
Name	A103001 - Slab on Grade - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	126 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$18,176.77

Description

Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel.

Condition Narrative

No major deficiencies were observed or reported. No cracking in concrete was observed.

Photos

Brudenell Fire Hall #4 - A103001

Brudenell Fire Hall #4 - A103001

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	126 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$68,248.62

Description
At the time of the assessment, where accessible in exposed areas for visual review on site, the building overall structure consists wood stud load-bearing walls, wood beams and joists supporting a sloped wood roof deck.

Condition Narrative
No siginificant deficiencies were observed or reported on the exposed structural framing system.

Photos


Brudenell Fire Hall #4 - B103001

B20 Exterior Enclosure

Element Description	
Name	B201005 - Louvers and Screens - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	2 / SM
Unit Cost	$880.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,395.26

Description

Fixed metal louvers are provided at exterior wall openings, for ventilation purposes.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - B201005

Recommendations

Recommendations #1 - Louvers and Screens	
Type	Life Cycle Replacement
Year	2042
Cost	$2,395.26

Element Description	
Name	B201008 - Exterior Soffits - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	45 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,512.70

Description

Exterior soffits are covered with perforated, prefinished aluminum panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - B201008

Brudenell Fire Hall #4 - B201008

Recommendations

Recommendations #1 - Exterior Soffits	
Type	Life Cycle Replacement
Year	2042
Cost	$8,512.70

Element Description	
Name	B201025 - Vinyl Siding - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	180 / SM
Unit Cost	$107.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$26,211.78

Description

Exterior wall surfaces are clad with vinyl siding.

Condition Narrative

No significant deficiencies were observed or reported. Some impact damage was observed and should monitored or repaired. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - B201025

Brudenell Fire Hall #4 - B201025

Brudenell Fire Hall #4 - B201025

Recommendations

Recommendations #1 - Vinyl Siding	
Type	Life Cycle Replacement
Year	2029
Cost	$26,211.78

Element Description	
Name	B202001 - Windows - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	4 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,532.53

Description

Exterior windows are insulated glazing units set in fixed frames with operable sashes.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2029
Cost	$6,532.53

Element Description	
Name	B203022 - Overhead Doors - Industrial - Firehall (Township)
Installation Year	2019
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	20 Years
Renewal Year	2044
Quantity / Unit of Measure	2 / Each
Unit Cost	$15,070.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$41,018.85

Description

Sectional panel overhead doors are provided on the building exterior.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - B203022

Brudenell Fire Hall #4 - B203022

Brudenell Fire Hall #4 - B203022

Recommendations

Recommendations #1 - Overhead Doors - Industrial	
Type	Life Cycle Replacement
Year	2044
Cost	$41,018.85

Element Description	
Name	B203024 - Single Door - Wood - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,627.21

Description

Exterior single-door assemblies include a painted steel clad wood panel that is set within a painted wood frame.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Brudenell Fire Hall #4 - B203023

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2029
Cost	$4,627.21

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	150 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$81,248.36

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2032
Cost	$81,248.36

C Interiors
C10 Interior Construction

Element Description	
Name	C101001 - Fixed Partitions - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	30 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,756.79

Description
Interior fixed partitions include gypsum board.

Condition Narrative
No significant deficiencies were observed or reported. Some impact damage was observed and should be repaired as part of maintenance. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - C101001


Brudenell Fire Hall #4 - C101001

Element Description	
Name	C102022 - Single Door - Wood - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	1 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,429.58

Description

Interior single-door assemblies include wood panels that are set within wood frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - B203024

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2032
Cost	$3,429.58

C30 Interior Finishes

Element Description	
Name	C301005 - Paint Wall Covering - Firehall (Township)
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	10 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	114 / SM Building
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,222.82

Description

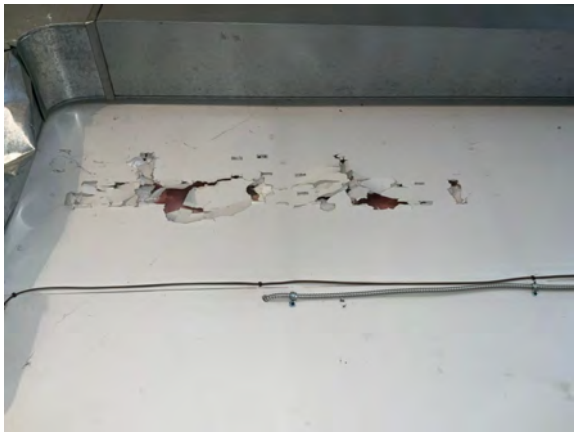
A paint finish is applied to most wall surfaces in the building.

Condition Narrative

Deficiencies observed or reported during the assessment include peeling and staining and discoloration, fading, wear, and deterioration. The deterioration is anticipated to progress due to age and ongoing building activities. Replacement is recommended in the short term.

Photos

Brudenell Fire Hall #4 - C301005



Brudenell Fire Hall #4 - C301005

Recommendations

Recommendations #1 - Paint Wall Covering	
Type	Life Cycle Replacement
Year	2026
Cost	$8,222.82

Element Description	
Name	C301022 - Wood Wall Finish - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	12 / SM
Unit Cost	$340.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,552.65

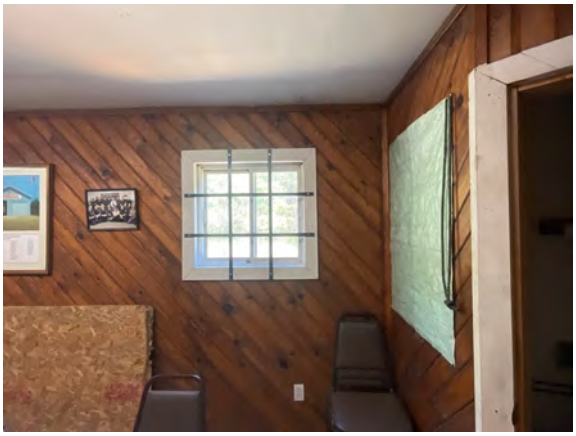
Description

Wall surfaces are provided with a wood finish.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos



Brudenell Fire Hall #4 - C301022

Brudenell Fire Hall #4 - C301022

Recommendations

Recommendations #1 - Wood Wall Finish	
Type	Life Cycle Replacement
Year	2029
Cost	$5,552.65

Element Description	
Name	C303006 - Painted Ceiling Structures - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	126 / SM
Unit Cost	$38.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,516.20

Description

A paint application is provided on gypsum board ceilings.

Condition Narrative

Deficiencies observed or reported during the assessment include staining and discoloration, fading, wear, and deterioration. The deterioration is anticipated to progress due to age and ongoing building activities. Replacement is recommended in the short term.

Photos

Brudenell Fire Hall #4 - C303006

Recommendations

Recommendations #1 - Painted Ceiling Structures	
Type	Life Cycle Replacement
Year	2026
Cost	$6,516.20

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Firehall (Township)
Installation Year	1992
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

Description

The plumbing fixtures include a floor-mounted vitreous china water closet. The water closet is equipped with a manual flush device.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include stains. Replacement is recommended in the short term.

Photos

Brudenell Fire Hall #4 - D201001

Brudenell Fire Hall #4 - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2024
Cost	$1,633.13

Element Description	
Name	D201003 - Lavatories - Firehall (Township)
Installation Year	1992
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

Description

The plumbing fixtures include a vitreous china lavatory. The lavatory is equipped with a manual tap set.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include leaking tap-sets. Replacement is recommended in the short term.

Photos

Brudenell Fire Hall #4 - D201003

Recommendations

Recommendations #1 - Lavatories	
Type	Life Cycle Replacement
Year	2024
Cost	$1,633.13

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	126 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,288.74

Description

The building domestic water distribution, where visible, consists of cold and hot water copper pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

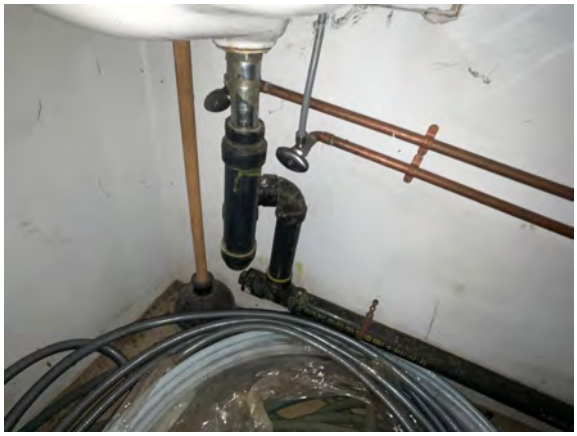
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - D202001

Brudenell Fire Hall #4 - D202001

Brudenell Fire Hall #4 - D202001



Brudenell Fire Hall #4 - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2032
Cost	$10,288.74

Element Description	
Name	D202008 - Domestic Water Expansion Tanks/Pressure Tanks - Firehall (Township)
Installation Year	1994
Condition	3 - Fair
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,590.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,246.73

Description

The domestic water distribution includes a well water pressure tank with regulator. The tank is manufactured by Water-x-trol and is located in the mechanical room.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Brudenell Fire Hall #4 - D202021

Recommendations

Recommendations #1 - Domestic Water Expansion Tanks/Pressure Tanks	
Type	Life Cycle Replacement
Year	2029
Cost	$6,246.73

Element Description	
Name	D202035 - Domestic Water Heaters - Residential Electric - Firehall (Township)
Installation Year	1994
Condition	4 - Poor
Expected Useful Life	12 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	45 / Liter
Unit Cost	$32.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,959.76

Description

The domestic water distribution includes a residential-grade electric domestic hot water heater. The water heater has a storage capacity of 12 Gal. The unit is manufactured by GSW, model 2EC12, serial number 9402933958, and is located in the mechanical room.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Brudenell Fire Hall #4 - D202034

Brudenell Fire Hall #4 - D202034

Recommendations

Recommendations #1 - Domestic Water Heaters - Residential Electric	
Type	Life Cycle Replacement
Year	2024
Cost	$1,959.76

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	126 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,288.74

Description

The building sanitary waste drainage, where visible, consists of rigid plastic pipe drain lines and risers. The drainage includes pipe vents, traps, and floor drains. The sanitary waste drainage connects to the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2042
Cost	$10,288.74

D30 HVAC

Element Description	
Name	D302003 - Fuel Fired Forced Air Furnaces - Firehall (Township)
Installation Year	2023
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	17 Years
Renewal Year	2041
Quantity / Unit of Measure	60 / MBH
Unit Cost	$66.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,389.34

Description

Building heating consists of a propane-forced air furnace. The furnace is manufactured by Luxaire and has an input heating capacity of 60 MBH. The unit is located inside the wallboard in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - D302003

Recommendations

Recommendations #1 - Electric Furnaces	
Type	Life Cycle Replacement
Year	2024
Cost	$89.82

Element Description	
Name	D304001 - Air Distribution Systems - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	126 / SM Building
Unit Cost	$178.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$30,523.25

Description

The building air distribution, where visible, consists of a network of galvanized sheet metal supply, return, and exhaust air ductwork. The distribution includes dampers, diffusers, and grilles.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. However minor damage was noted on the duct metal and blocked air filters which need to be addressed in the ongoing maintenance.

Photos

Brudenell Fire Hall #4 - D304001

Brudenell Fire Hall #4 - D304001

Brudenell Fire Hall #4 - D304001

Brudenell Fire Hall #4 - D304001

Recommendations

Recommendations #1 - Air Distribution Systems	
Type	Life Cycle Replacement
Year	2042
Cost	$30,523.25

Element Description	
Name	D304033 - Exhaust Fans - Residential - Firehall (Township)
Installation Year	1992
Condition	4 - Poor
Expected Useful Life	25 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,150.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,565.09

Description

Building ventilation includes centrifugal exhaust fans for ventilation in the washroom.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Brudenell Fire Hall #4 - D304031

Recommendations

Recommendations #1 - Exhaust Fans - Residential	
Type	Life Cycle Replacement
Year	2024
Cost	$1,565.09

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Firehall (Township)
Installation Year	2017
Condition	3 - Fair
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$702.25

Description

ABC Type Fire Extinguishers are located in the common area space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - D403002

Brudenell Fire Hall #4 - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$702.25

D50 Electrical

Element Description	
Name	D501024 - Main Service Panels - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	1 / Each
Unit Cost	$16,330.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,224.22

Description

The electrical service includes a main service panelboard identified as the main service disconnect. The panelboard is rated 225 A at 120/240V and is located in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - D501003

Brudenell Fire Hall #4 - D501003

Recommendations

Recommendations #1 - Main Service Panels	
Type	Life Cycle Replacement
Year	2032
Cost	$22,224.22

Element Description	
Name	D501033 - Panelboards Residential - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,510.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,055.03

Description

The electrical service includes a panelboard rated 100A at 120/240V and is located in the hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - D501025

Recommendations

Recommendations #1 - Panelboards Residential	
Type	Life Cycle Replacement
Year	2032
Cost	$2,055.03

Element Description	
Name	D502002 - Interior Lighting - Firehall (Township)
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	3 Years
Renewal Year	2027
Quantity / Unit of Measure	126 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$19,205.64

Description

The building's interior lighting consists of linear light fixtures in the main office and hall. Linear fixtures are T8.

Condition Narrative

No significant deficiencies were observed or reported. Some of the lighting was updated over time. However, the lighting is energy inefficient. Replacement or upgrade to LED is recommended in the short term.

Photos

Brudenell Fire Hall #4 - D502002

Brudenell Fire Hall #4 - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2027
Cost	$19,205.64

Element Description	
Name	D502011 - Branch Wiring and Devices - Residential - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	126 / SM
Unit Cost	$64.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,974.65

Description

The building branch wiring consists of non-metallic sheathed copper wire. The wiring includes junction boxes, devices, switches and receptacles.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - D502001

Brudenell Fire Hall #4 - D502001

Brudenell Fire Hall #4 - D502001

Recommendations

Recommendations #1 - Branch Wiring and Devices - Residential	
Type	Life Cycle Replacement
Year	2042
Cost	$10,974.65

Element Description	
Name	D502021 - Interior Lighting Residential - Firehall (Township)
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	3 Years
Renewal Year	2027
Quantity / Unit of Measure	126 / SM
Unit Cost	$35.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,001.76

Description

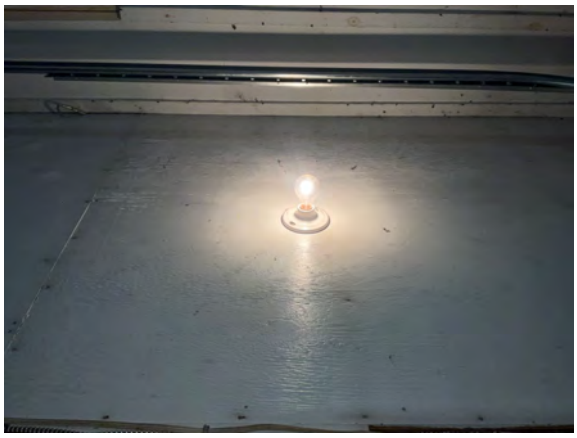
The building interior lighting consists of Incandescent light bulb fixtures in offices corridors and entrances.

Condition Narrative

No significant deficiencies were observed or reported. However, the lighting is energy inefficient. Replacement or upgrade to LED is recommended in the short term /should be considered.

Photos

Brudenell Fire Hall #4 - D502002



Brudenell Fire Hall #4 - D502002

Recommendations

Recommendations #1 - Interior Lighting Residential	
Type	Life Cycle Replacement
Year	2027
Cost	$6,001.76

Element Description	
Name	D502041 - Exterior Lighting - Firehall (Township)
Installation Year	2022
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	2 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,562.36

Description

The building exterior lighting consists of wall-pack mounted fixtures along the perimeter of the building and canopy pot light fixtures at entrances. The wall fixtures are LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - D502041

Brudenell Fire Hall #4 - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2042
Cost	$1,562.36

G Building Sitework
G20 Site Improvements

Element Description	
Name	G204081 - Message Sign - Wall-Mounted - Firehall (Township)
Installation Year	2017
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	13 Years
Renewal Year	2037
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,500.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,041.42

Description
Message signs consist of a main building identification sign.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Brudenell Fire Hall #4 - C103021

Recommendations

Recommendations #1 - Message Sign - Wall-Mounted	
Type	Life Cycle Replacement
Year	2029
Cost	$2,041.42

G30 Site Mechanical Utilities

Element Description	
Name	G301001 - Well Systems - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	1 / Each
Unit Cost	$127,770.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$173,887.81

Description

The site includes a drilled well for water supply from an aquifer. The well is assumed to consist of a metal casing with a well screen and drop pipe for the submersible pump.

Condition Narrative

The well is concealed below ground and cannot be fully assessed via visual means. However, no significant deficiencies were reported. Replacement is not anticipated in the short term. OR Deficiencies observed or reported at the time of the assessment include maintenance issues /poor performance /failure. Replacement is recommended in the short term.

Photos

Brudenell Fire Hall #4 - G301001

Recommendations

Recommendations #1 - Well Systems	
Type	Life Cycle Replacement
Year	2042
Cost	$173,887.81

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,198.71

Description

The building site includes a septic system comprising an underground concrete septic tank presumably connected to a drain field.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Recommendations

Recommendations #1 - Septic Tank - 4000 Gallons	
Type	Life Cycle Replacement
Year	2042
Cost	$51,198.71

G40 Site Electrical Utilities

Element Description	
Name	G401010 - Electrical Service Single Phase - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	55 / LM
Unit Cost	$297.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,231.02

Description

The overhead/underground electrical service is assumed to be equivalent to 200A 3 wire single phase from the utility to the building electrical service equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Fire Hall #4 - G401010

Recommendations

Recommendations #1 - Electrical Service Single Phase	
Type	Life Cycle Replacement
Year	2042
Cost	$22,231.02

2 BRUDNELL WASTE SITE

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Brudenell Waste Site

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Brudenell Waste Site building, located at 6824 Brudenell Rd, Palmer Rapids, ON, was reportedly constructed in 2018. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 6 SM (64 SF). The structure is used as a warming shack. The Building Assessment was undertaken on May 19, 2023.

Facility No	BWS1
Name	Brudenell Waste Site
Address	6824 Brudenell Rd - Palmer Rapids - ON - Canada
Area	64 SM
Floors	1
Year Constructed	2018
Condition Assessment Date	May 19, 2023
Replacement value	$27,940.47
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Brudenell Waste Site, located at 6824 Brudenell Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 19, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	6 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,249.97

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely a wood joist floor supported on precast concrete footings, and load bearing wood stud walls supporting a roof deck with roof sheathing.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - B201099

Brudenell Waste Site - B201099

Brudenell Waste Site - B103001

Brudenell Waste Site - B103001

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	44 Years
Renewal Year	2068
Quantity / Unit of Measure	2 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$378.35

Description

Exterior soffits are covered with perforated metal panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - B201008

Brudenell Waste Site - B201008

Element Description	
Name	B201024 - Metal Cladding - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	18 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,923.94

Description

Exterior wall surfaces include metal siding with a vertical ribbed surface profile.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - B201024

Brudenell Waste Site - B201024

Element Description	
Name	B202001 - Windows - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	2 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,266.30

Description

Exterior windows are single-paned glazing units set in operable frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - B202001

Brudenell Waste Site - B202001

Brudenell Waste Site - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2053
Cost	$3,266.30

Element Description	
Name	B203024 - Single Door - Wood - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,627.25

Description

Exterior single-door assemblies include a painted steel clad wood panel that is set within a painted wood frame.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - C102021

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	7 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,791.63

Description

Pitched roof surfaces are covered with prefinished metal roofing panels that include exposed fasteners.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - B301028

C Interiors
C30 Interior Finishes

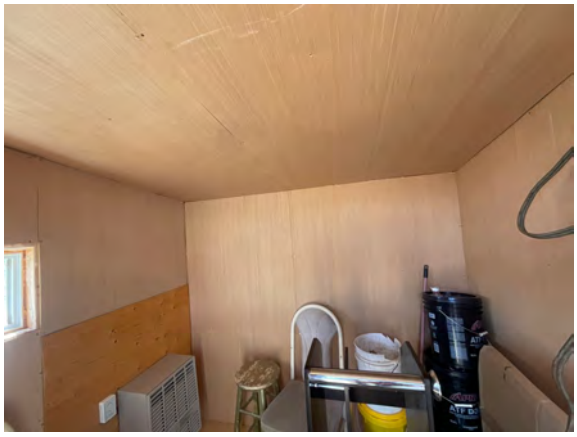
Element Description	
Name	C301022 - Wood Wall Finish - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	6 / SM
Unit Cost	$340.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,388.18

Description
Solid wood panels are secured to wall surfaces.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - C301022


Brudenell Waste Site - C301022

Recommendations

Recommendations #1 - Wood Wall Finish	
Type	Life Cycle Replacement
Year	2043
Cost	$1,388.18

D Services
D30 HVAC

Element Description	
Name	D301002 - Natural Gas Supply Piping and Fittings - Propane Supply - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	6 / SM
Unit Cost	$30.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$244.97

Description

The building propane supply consists of Polyethylene Gas tube piping and fittings from the storage tank to the gas-fired equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - D301002

Element Description	
Name	D302004 - Fuel-Fired Unit Heaters - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	12 Years
Renewal Year	2036
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,940.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$2,681.09

Description

Building heating includes a propane-fired unit heater, with a heating capacity of approximately 10 MBH.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - D305009

Brudenell Waste Site - D305009

Recommendations

Recommendations #1 - Fuel-Fired Unit Heaters	
Type	Life Cycle Replacement
Year	2036
Cost	$2,681.09

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$351.13

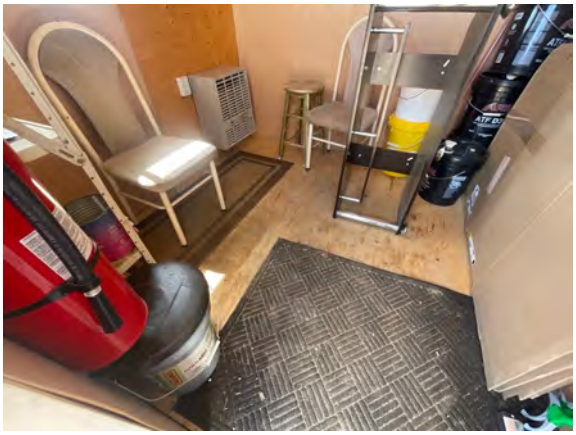
Description

An ABC Type Fire Extinguisher is located next to the entrance space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Brudenell Waste Site - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$351.13

D50 Electrical

Element Description	
Name	D503009 - Video Surveillance Systems - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	14 Years
Renewal Year	2038
Quantity / Unit of Measure	6 / SM Building
Unit Cost	$22.00
Difficulty / Regional / Soft Cost / Replacement	6.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,077.88

Description

The building includes a video surveillance system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - G403099

Recommendations

Recommendations #1 - Video Surveillance Systems	
Type	Life Cycle Replacement
Year	2038
Cost	$1,077.88

G Building Sitework
G40 Site Electrical Utilities

Element Description	
Name	G402017 - Flood and Field Light Fixtures - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,440.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,959.78

Description

The building exterior lighting consists of pole mounted flood light fixtures. The fixtures are LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Brudenell Waste Site - D502041

Recommendations

Recommendations #1 - Flood and Field Light Fixtures	
Type	Life Cycle Replacement
Year	2043
Cost	$1,959.78

3 FOUR SEASON PARK – CANTEEN

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Four Season Park - Canteen

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Four Season Park - Canteen, located at 47 Four Seasons Park Rd, Palmer Rapids, ON, was reportedly constructed in 1984. The original building is a single-storey building and has a reported gross floor area of approximately 68 SM (734 SF). The building is used as a Park Canteen. The site visit was done on Mary 17, 2023.

Facility No	FSPC1
Name	Four Season Park - Canteen
Address	47 Four Seasons Park Rd - Palmer Rapids - ON - Canada
Area	734 SM
Floors	1
Year Constructed	1984
Condition Assessment Date	May 17, 2023
Replacement value	$569,801.67
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Four Season Park - Canteen, located at 47 Four Seasons Park Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 17, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A101001 - Standard Foundations - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	35 Years
Renewal Year	2059
Quantity / Unit of Measure	10 / LM Footprint
Unit Cost	$1,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$19,869.97

Description
Based on the information gathered during the assessment, the foundations are standard shallow CMU foundations bearing on good native soil.

Condition Narrative
No significant deficiencies were observed or reported.

Photos

Four Season Park - Canteen - A101001


Four Season Park - Canteen - A101001

B Shell
B10 Superstructure

Element Description	
Name	B102004 - Canopy - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	35 Years
Renewal Year	2059
Quantity / Unit of Measure	24 / SM
Unit Cost	$43.78
Difficulty / Regional / Soft Cost / Replacement	10.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$14,299.85

Description

The building exterior includes a canopy structure consisting of a wood-framed canopy supported on wood columns on concrete caissons.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - B102004

Element Description	
Name	B103001 - Structure - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	35 Years
Renewal Year	2059
Quantity / Unit of Measure	56 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$30,333.01

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the canteen structural framing system is likely a wood joist floor supported on precast concrete and timber footings and load bearing wood stud walls, supporting a roof deck with roof sheathing.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - B103001

Four Season Park - Canteen - B103001

Four Season Park - Canteen - B103001

Four Season Park - Canteen - B103001

Element Description	
Name	B103001 - Structure - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	35 Years
Renewal Year	2059
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,499.93

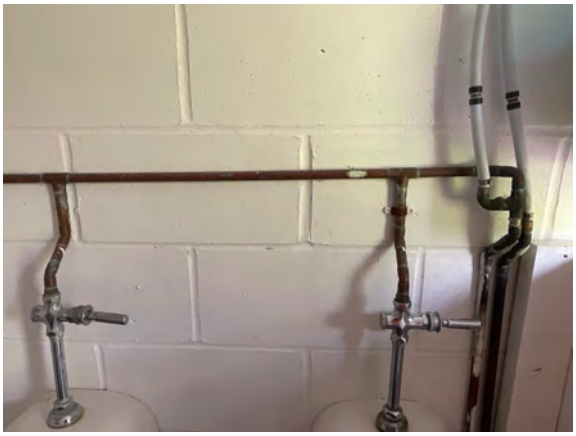
Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the washroom structural framing system is likely a wood joist floor supported on CMU foundation walls and load bearing CMU walls, supporting a roof deck with roof sheathing.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Four Season Park - Canteen - C103021

Four Season Park - Canteen - C103021

B20 Exterior Enclosure

Element Description	
Name	B201005 - Louvers and Screens - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	1 / SM
Unit Cost	$880.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,197.64

Description
Fixed metal louvers are provided at exterior wall openings, for ventilation purposes.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Four Season Park - Canteen - B201005

Recommendations

Recommendations #1 - Louvers and Screens	
Type	Life Cycle Replacement
Year	2034
Cost	$1,197.64

Element Description	
Name	B201010 - Exterior Coatings/Paint - Canteen Building
Installation Year	2020
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	104 / SM
Unit Cost	$46.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,510.82

Description

A stain finish is applied to exterior wall surfaces.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - B201010

Four Season Park - Canteen - B201010

Recommendations

Recommendations #1 - Exterior Coatings/Paint	
Type	Life Cycle Replacement
Year	2030
Cost	$6,510.82

Element Description	
Name	B201026 - Wood Siding - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	104 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$35,667.96

Description

Exterior wall surfaces are clad with wood siding.

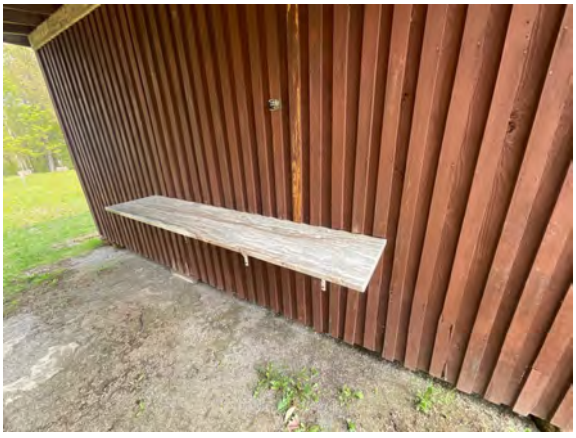
Condition Narrative

No significant deficiencies were observed or reported. Minor damage should be repaired as part of maintenance Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - B201026

Four Season Park - Canteen - B201026



Four Season Park - Canteen - B201026

Recommendations

Recommendations #1 - Wood Siding	
Type	Life Cycle Replacement
Year	2029
Cost	$35,667.96

Element Description	
Name	B202001 - Windows - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	5 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$8,165.74

Description

Exterior windows are insulated glazing units set in operable frames.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Four Season Park - Canteen - B202001

Four Season Park - Canteen - B202001

Four Season Park - Canteen - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2029
Cost	$8,165.74

Element Description	
Name	B203024 - Single Door - Wood - Canteen Building
Installation Year	2010
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	4 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$18,509.02

Description

Exterior single-door assemblies include painted steel clad wood panels that are set within painted wood frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - B203023

Four Season Park - Canteen - B203023

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2040
Cost	$18,509.02

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	82 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$44,416.19

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Four Season Park - Canteen - B301028

Four Season Park - Canteen - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2029
Cost	$44,416.19

C Interiors
C10 Interior Construction

Element Description	
Name	C103011 - Millwork - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	68 / SM of Building
Unit Cost	$86.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$7,958.88

Description
Fixed millwork includes fixed cabinetry and counters, display cases, and shelving.

Condition Narrative
No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Four Season Park - Canteen - C103011


Four Season Park - Canteen - C103011

Recommendations

Recommendations #1 - Millwork	
Type	Life Cycle Replacement
Year	2029
Cost	$7,958.88

C20 Stairs

Element Description	
Name	C201004 - Exterior Ramp Construction - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	6 / SM
Unit Cost	$1,220.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,981.10

Description

The elevation difference between the building and grade level is bridged by a wood ramp.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - C201004

Four Season Park - Canteen - C201004

Recommendations

Recommendations #1 - Exterior Ramp Construction	
Type	Life Cycle Replacement
Year	2029
Cost	$4,981.10

C30 Interior Finishes

Element Description	
Name	C301022 - Wood Wall Finish - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	68 / SM
Unit Cost	$340.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$15,732.66

Description

Finished wood boards are mechanically fastened to the wall structure.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - C301022

Four Season Park - Canteen - C301022

Recommendations

Recommendations #1 - Wood Wall Finish	
Type	Life Cycle Replacement
Year	2029
Cost	$15,732.66

Element Description	
Name	C302003 - Hardwood Floor - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	20 / SM
Unit Cost	$314.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$8,546.81

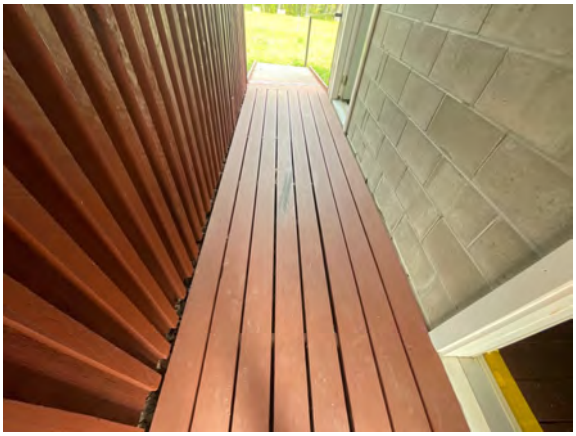
Description

Interior floor surfaces are finished with pressure-treated SPF decking boards.

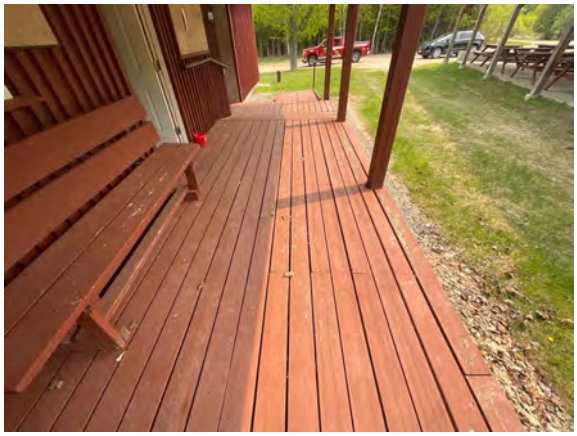
Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos



Four Season Park - Canteen - C302003



Four Season Park - Canteen - C302003

Recommendations

Recommendations #1 - Hardwood Floor	
Type	Life Cycle Replacement
Year	2029
Cost	$8,546.81

Element Description	
Name	C302022 - Vinyl Tile / Plank Floor - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	48 / SM
Unit Cost	$132.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$8,623.02

Description

Interior floor surfaces are finished with vinyl tiles.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Four Season Park - Canteen - C302022

Recommendations

Recommendations #1 - Vinyl Tile / Plank Floor	
Type	Life Cycle Replacement
Year	2029
Cost	$8,623.02

Element Description	
Name	C303005 - Wood Ceiling - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	68 / SM
Unit Cost	$283.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$13,095.13

Description

Finished wood boards are mechanically fastened to the ceiling structure.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - C303099

Four Season Park - Canteen - C303099

Four Season Park - Canteen - C303099

Recommendations

Recommendations #1 - Wood Ceiling	
Type	Life Cycle Replacement
Year	2029
Cost	$13,095.13

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	3 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,899.45

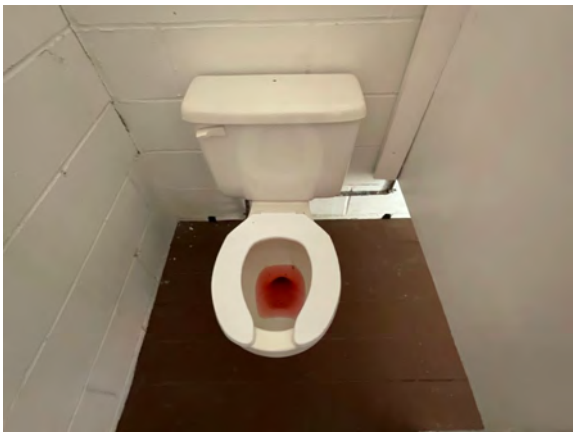
Description

The plumbing fixtures include floor-mounted wall-mounted vitreous china water closets. The water closets are equipped with manual flush devices.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos



Four Season Park - Canteen - D201003

Four Season Park - Canteen - D201003

Four Season Park - Canteen - D201003

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2029
Cost	$4,899.45

Element Description	
Name	D201002 - Urinals - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,266.30

Description

The plumbing fixtures include wall-mounted vitreous china urinals. The urinals are equipped with manual flush devices. The urinals are waterless.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Four Season Park - Canteen - D201002

Recommendations

Recommendations #1 - Urinals	
Type	Life Cycle Replacement
Year	2029
Cost	$3,266.30

Element Description	
Name	D201003 - Lavatories - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,266.30

Description

The plumbing fixtures include enameled vitreous china lavatories. The lavatories are equipped with manual tap-sets.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Four Season Park - Canteen - D201001

Four Season Park - Canteen - D201001

Recommendations

Recommendations #1 - Lavatories	
Type	Life Cycle Replacement
Year	2029
Cost	$3,266.30

Element Description	
Name	D201004 - Sinks - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,266.30

Description

The plumbing fixtures include single and double bowl stainless steel sinks equipped with manual tap-sets and located in kitchen.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Four Season Park - Canteen - D201004

Four Season Park - Canteen - D201004

Recommendations

Recommendations #1 - Sinks	
Type	Life Cycle Replacement
Year	2029
Cost	$3,266.30

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	68 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$5,552.70

Description

The building domestic water distribution, where visible, consists of cold and hot water copper and PVC pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

No significant deficiencies were observed or reported. The system appears to have been updated. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - D202001

Four Season Park - Canteen - D202001

Four Season Park - Canteen - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2029
Cost	$5,552.70

Element Description	
Name	D202008 - Domestic Water Expansion Tanks/Pressure Tanks - Canteen Building
Installation Year	2019
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,590.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,246.79

Description

The domestic water distribution includes a pressure /expansion tank with regulator. The tank is manufactured by Red Lion and is located in the kitchen. The tank has a capacity of 75 L.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - D202008

Four Season Park - Canteen - D202008

Recommendations

Recommendations #1 - Domestic Water Expansion Tanks/Pressure Tanks	
Type	Life Cycle Replacement
Year	2049
Cost	$6,246.79

Element Description	
Name	D202035 - Domestic Water Heaters - Residential Electric - Canteen Building
Installation Year	2018
Condition	2 - Good
Expected Useful Life	12 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	182 / Liter
Unit Cost	$32.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$7,926.21

Description

The domestic water distribution includes a residential grade electric domestic hot water heater. The water heater has an input heating capacity of 3000 kW and a storage capacity of 48.1 Gal. The unit is manufactured by GSW6, model 1512A041382, serial number G650SDE1-30 210, and is located in the kitchen.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - D202034

Four Season Park - Canteen - D202034

Recommendations

Recommendations #1 - Domestic Water Heaters - Residential Electric	
Type	Life Cycle Replacement
Year	2030
Cost	$7,926.21

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	68 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$5,552.70

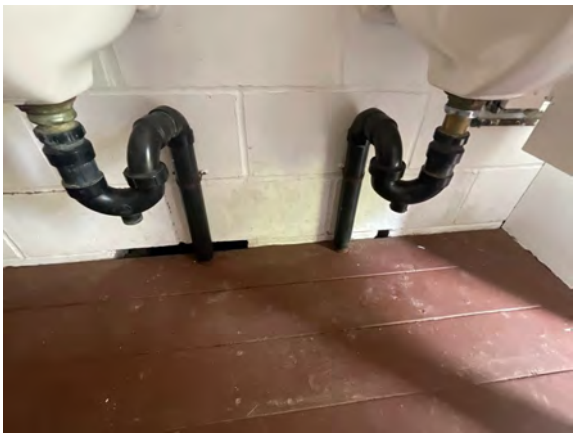
Description

The building sanitary waste drainage, where visible, consists of ABS pipe drain lines and risers. The drainage includes steel pipe vents, traps and floor drains. The sanitary waste drainage connects to the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Four Season Park - Canteen - D203001

Four Season Park - Canteen - D203001

Four Season Park - Canteen - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2034
Cost	$5,552.70

D30 HVAC

Element Description	
Name	D304033 - Exhaust Fans - Residential - Canteen Building
Installation Year	2010
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,150.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,130.20

Description

Building ventilation includes centrifugal exhaust fans for ventilation in washrooms.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - D304031

Four Season Park - Canteen - D304031

Recommendations

Recommendations #1 - Exhaust Fans - Residential	
Type	Life Cycle Replacement
Year	2035
Cost	$3,130.20

Element Description	
Name	D305008 - Force Flow Units (Electric) - Canteen Building
Installation Year	1984
Condition	3 - Fair
Expected Useful Life	18 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	1 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$781.19

Description

Building HVAC includes a wall mounted electric force flow heater.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Four Season Park - Canteen - D305008

Recommendations

Recommendations #1 - Force Flow Units (Electric)	
Type	Life Cycle Replacement
Year	2026
Cost	$781.19

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Canteen Building
Installation Year	2017
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$351.13

Description

An ABC Type Fire Extinguisher is located in the kitchen area space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - D403001

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$351.13

D50 Electrical

Element Description	
Name	D501024 - Main Service Panels - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$16,330.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$22,224.43

Description

The electrical service includes a main service panel. The panelboard is rated 225 A at 120/240V.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.
Note: No photo available.

Recommendations

Recommendations #1 - Main Service Panels	
Type	Life Cycle Replacement
Year	2029
Cost	$22,224.43

Element Description	
Name	D502001 - Branch Wiring and Devices - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	68 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$13,048.86

Description

The building branch wiring consists of insulated copper wire in rigid metal conduit and flexible armored cable. The wiring includes junction boxes, devices, switches and receptacles.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - D502001

Four Season Park - Canteen - D502001

Four Season Park - Canteen - D502001

Four Season Park - Canteen - D502001

Recommendations

Recommendations #1 - Branch Wiring and Devices	
Type	Life Cycle Replacement
Year	2034
Cost	$13,048.86

Element Description	
Name	D502002 - Interior Lighting - Canteen Building
Installation Year	1984
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	68 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,365.05

Description

The building interior lighting consists of a combination of linear light fixtures in rooms and in lobbies and entrances. Linear fixtures are T8.

Condition Narrative

No significant deficiencies were observed or reported. Some of the lighting was updated over time. However, the lighting is energy inefficient. Replacement or upgrade to LED is recommended in the short term /should be considered.

Photos

Four Season Park - Canteen - D502002

Four Season Park - Canteen - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2026
Cost	$10,365.05

Element Description	
Name	D502041 - Exterior Lighting - Canteen Building
Installation Year	1984
Condition	3 - Fair
Expected Useful Life	20 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	3 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$2,343.57

Description

The building exterior lighting consists of wall surface mounted fixtures along the perimeter of the building and canopy pot light fixtures at entrances. The wall fixtures are incandescent bulbs.

Condition Narrative

No significant deficiencies were observed or reported. However, the lighting is energy inefficient. Replacement or upgrade to LED is recommended in the short term /should be considered.

Photos

Four Season Park - Canteen - D502041

Four Season Park - Canteen - D502041

Four Season Park - Canteen - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2026
Cost	$2,343.57

G Building Sitework
G30 Site Mechanical Utilities

Element Description	
Name	G301001 - Well Systems - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	1 / Each
Unit Cost	$127,770.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$173,889.48

Description

The site includes a drilled well for water supply from an aquifer. The well is assumed to consist of a metal casing with a well screen and drop pipe for the submersible /pumphouse pump.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - G301001

Recommendations

Recommendations #1 - Well Systems	
Type	Life Cycle Replacement
Year	2034
Cost	$173,889.48

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$51,199.20

Description

The building site includes a septic system comprising an underground concrete septic tank presumably connected to a drain field.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Recommendations

Recommendations #1 - Septic Tank - 4000 Gallons	
Type	Life Cycle Replacement
Year	2034
Cost	$51,199.20

G40 Site Electrical Utilities

Element Description	
Name	G401010 - Electrical Service Single Phase - Canteen Building
Installation Year	1984
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	20 / LM
Unit Cost	$297.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$8,084.08

Description

The overhead electrical service is assumed to be equivalent to 200A 3 wire single phase from the utility to the building electrical service equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Canteen - G401010

Four Season Park - Canteen - G401010

Recommendations

Recommendations #1 - Electrical Service Single Phase	
Type	Life Cycle Replacement
Year	2034
Cost	$8,084.08

4 FOUR SEASON PARK – PAVILLION

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Four Season Park - Pavillion

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Four Season Park - Pavillion, located at 47 Four Seasons Park Rd, Palmer Rapids, ON, was reportedly constructed in 2010. The original building is a single-storey building and has a reported gross floor area of approximately 112 SM (1200 SF). The building is used as a Park sitting area. The site visit was done on May 17, 2023.

Facility No	FSPP1
Name	Four Season Park - Pavillion
Address	47 Four Seasons Park Rd - Palmer Rapids - ON - Canada
Area	1200 SM
Floors	1
Year Constructed	2010
Condition Assessment Date	May 17, 2023
Replacement value	$174,267.83
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Four Season Park - Pavillion, located at 47 Four Seasons Park Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 17, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A103001 - Slab on Grade - Recreation
Installation Year	2010
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	61 Years
Renewal Year	2085
Quantity / Unit of Measure	112 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$16,157.28

Description
Based on the information gathered during the assessment, the floor slab appears to be cast in place concrete continuously supported by a moisture barrier on a free draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible.

Condition Narrative
Some minor isolated cracking was observed, no significant elevation difference to suggest differential settlement of the concrete slab-on-grade was noted. However, the cracks are recommended to be monitored and should a significant magnitude change be noted, a professional/experienced structural engineer be retained.

Photos

Four Season Park - Pavillion - A103001


Four Season Park - Pavillion - A103001

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Recreation
Installation Year	2010
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	61 Years
Renewal Year	2085
Quantity / Unit of Measure	134 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$72,582.56

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building overall structure consists wood column load-bearing posts with braces on concrete caissons supporting a sloped wood roof deck.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Pavillion - B102001

Four Season Park - Pavillion - B102001

Four Season Park - Pavillion - B103001

Four Season Park - Pavillion - B103001

B20 Exterior Enclosure

Element Description	
Name	B201005 - Louvers and Screens - Recreation
Installation Year	2010
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	36 Years
Renewal Year	2060
Quantity / Unit of Measure	1 / SM
Unit Cost	$880.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,197.64

Description

Fixed metal louvers are provided at exterior wall openings, for ventilation purposes. are installed over roof deck sides.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Pavillion - B201005

Element Description	
Name	B201008 - Exterior Soffits - Recreation
Installation Year	2010
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	36 Years
Renewal Year	2060
Quantity / Unit of Measure	22 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,161.81

Description

Exterior soffits are covered with perforated, prefinished aluminum panel.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Pavillion - B201008

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Recreation
Installation Year	2010
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	26 Years
Renewal Year	2050
Quantity / Unit of Measure	134 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$72,582.56

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Pavillion - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2050
Cost	$72,582.56

C Interiors
C30 Interior Finishes

Element Description	
Name	C303099 - Other Ceiling Finishes - Recreation
Installation Year	2010
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	1 / Lump Sum
Unit Cost	$5,000.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,804.79

Description
Prefinished vinyl siding is mechanically fastened to the roof structure.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Pavillion - C303099


Four Season Park - Pavillion - C303099

Recommendations

Recommendations #1 - Other Ceiling Finishes	
Type	Life Cycle Replacement
Year	2040
Cost	$6,804.79

D Services
D50 Electrical

Element Description	
Name	D502041 - Exterior Lighting - Recreation
Installation Year	2019
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	15 Years
Renewal Year	2039
Quantity / Unit of Measure	1 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$781.19

Description

The building exterior lighting consists of a surface mounted fixtures at the perimeter of the building. The wall fixture is LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Pavillion - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2039
Cost	$781.19

5 FOUR SEASON PARK - STORAGE BUILDING

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Four Season Park - Storage Building

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Four Season Park - Pavillion, located at 47 Four Seasons Park Rd, Palmer Rapids, ON, was reportedly constructed in 1967. The original building is a single-storey building and has a reported gross floor area of approximately 54 SM (576 SF). The building is used as a Park storage. The site visit was done on May 17, 2023.

Facility No	FSPSB1
Name	Four Season Park - Storage Building
Address	47 Four Seasons Park Rd - Palmer Rapids - ON - Canada
Area	576 SM
Floors	1
Year Constructed	1967
Condition Assessment Date	May 17, 2023
Replacement value	$96,159.50
3 Year FCI	6%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Four Season Park - Storage Building, located at 47 Four Seasons Park Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 17, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A103001 - Slab on Grade - Storage Building
Installation Year	1967
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	54 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$7,790.12

Description
Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place wood continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Storage Building - A103001

Recommendations

Recommendations #1 - Slab on Grade	
Type	Life Cycle Replacement
Year	2042
Cost	$7,790.12

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Storage Building
Installation Year	1967
Condition	3 - Fair
Expected Useful Life	75 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	54 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$29,249.69

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely a wood joist floor supported on precast concrete and wood board footings, and load bearing wood column walls and beams supporting a wood roof joist and rafter system.

Condition Narrative

No significant deficiencies were observed or reported. However cracks in some concrete footings and deterioration of some wood board footings were observed. Some deterioration of the wood floor was also observed. Repair is recommended. Replacement is not anticipated in the short term.

Photos

Four Season Park - Storage Building - B103001

Four Season Park - Storage Building - B103001

Four Season Park - Storage Building - B103001

Four Season Park - Storage Building - B103001

Recommendations

Recommendations #1 - Structure	
Type	Major Repair
Year	2023
Cost	$5,800.00

Recommendations #2 - Structure	
Type	Life Cycle Replacement
Year	2042
Cost	$29,249.69

B20 Exterior Enclosure

Element Description	
Name	B201024 - Metal Cladding - Storage Building
Installation Year	1967
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	6 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,641.31

Description
Prefinished metal composite panels with sub-framing are secured to the exterior wall structure.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Storage Building - B201024


Four Season Park - Storage Building - B201024

Recommendations

Recommendations #1 - Metal Cladding	
Type	Life Cycle Replacement
Year	2029
Cost	$1,641.31

Element Description	
Name	B201026 - Wood Siding - Storage Building
Installation Year	1967
Condition	3 - Fair
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	92 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	0.70 / 1.04689 / 1.30000 / 1.0000
Element Cost	$22,086.70

Description

Exterior wall surfaces include wood panel siding that is installed in a clapboard vertically-oriented configuration.

Condition Narrative

Deficiencies observed or reported during the assessment include weathered look and wear, and some wood rot (along the bottoms), The deterioration is anticipated to progress due to age and exposure to the elements. Given the current function of the building as a storage facility, repair is recommended as needed, with the costing including in the repair of the structure. Replacement is not anticipated in the short term.

Photos

Four Season Park - Storage Building - B201099

Four Season Park - Storage Building - B201099

Four Season Park - Storage Building - B201026

Four Season Park - Storage Building - B201026

Four Season Park - Storage Building - B201026

Recommendations

Recommendations #1 - Wood Siding	
Type	Life Cycle Replacement
Year	2029
Cost	$22,086.70

Element Description	
Name	B203024 - Single Door - Wood - Storage Building
Installation Year	2010
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,627.25

Description

Exterior single-door assemblies include a painted steel clad wood panel that is set within a painted wood frame.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Storage Building - B203023

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2040
Cost	$4,627.25

Element Description	
Name	B203024 - Single Door - Wood - Storage Building
Installation Year	1967
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,627.25

Description

Exterior single-door assemblies include painted wood panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Four Season Park - Storage Building - B203024

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2029
Cost	$4,627.25

Element Description	
Name	B203027 - Double Door - Wood - Storage Building
Installation Year	1967
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$6,270.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$8,533.20

Description

Exterior double-door assemblies include unpainted wood panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. It should be noted that the doors will not safeguard against theft of equipment inside.

Photos

Four Season Park - Storage Building - B203027

Four Season Park - Storage Building - B203027

Four Season Park - Storage Building - B203027

Recommendations

Recommendations #1 - Double Door - Wood	
Type	Life Cycle Replacement
Year	2029
Cost	$8,533.20

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Storage Building
Installation Year	1967
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	65 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$17,603.98

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Four Season Park - Storage Building - B301028

Four Season Park - Storage Building - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2029
Cost	$17,603.98

6 GENRICKS LAKE BEACH

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Genricks Lake Beach

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Genricks Lake Beach building, located at 117 Genricks Rd., Palmer Rapids, ON, was reportedly constructed in 2022. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 12 SM (128 SF). The structure is used as Washroom and changing room. The Building Assessment was undertaken on May 17, 2023.

Facility No	GLB1
Name	Genricks Lake Beach
Address	117 Genricks Rd. - Palmer Rapids - ON - Canada
Area	128 SM
Floors	1
Year Constructed	2022
Condition Assessment Date	May 17, 2023
Replacement value	$104,026.09
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Genricks Lake Beach, located at 117 Genricks Rd. - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 17, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A103001 - Slab on Grade - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	73 Years
Renewal Year	2097
Quantity / Unit of Measure	12 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	3.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$5,193.41

Description
Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible. The slab presumably includes an integrated below grade chamber for sanitary waste.

Condition Narrative
No significant deficiencies were observed or reported.

Photos


Genricks Lake Beach - A103001

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	73 Years
Renewal Year	2097
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,499.93

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely load bearing wood column walls and beams supporting a wood roof joist and rafter system.

Condition Narrative

No significant deficiencies were observed or reported.

Photos

Genricks Lake Beach - B103001

Genricks Lake Beach - B103001

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	4 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$756.69

Description

Exterior soffits are covered with perforated aluminum panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Genricks Lake Beach - B201008

Element Description	
Name	B201024 - Metal Cladding - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	36 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$9,847.88

Description

Exterior wall surfaces include prefinished metal siding with a vertical clapboard surface profile.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Genricks Lake Beach - B201024

Genricks Lake Beach - B201024

Element Description	
Name	B203023 - Single Door - Hollow Metal - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	28 Years
Renewal Year	2052
Quantity / Unit of Measure	2 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,942.09

Description

Exterior single-door assemblies include painted steel panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Genricks Lake Beach - B203023

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2052
Cost	$10,942.09

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	14 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$7,583.25

Description

Pitched roof surfaces are covered with prefinished metal roofing panels that include exposed fasteners.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Genricks Lake Beach - B301028

C Interiors
C30 Interior Finishes

Element Description	
Name	C301099 - Other Wall Finishes - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	28 Years
Renewal Year	2052
Quantity / Unit of Measure	1 / Lump Sum
Unit Cost	$5,000.00
Difficulty / Regional / Soft Cost / Replacement	1.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,207.18

Description
Wall and ceiling surfaces are covered with prefinished metal siding and trim.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Genricks Lake Beach - C301099


Genricks Lake Beach - C301099


Genricks Lake Beach - C301099

Recommendations

Recommendations #1 - Other Wall Finishes	
Type	Life Cycle Replacement
Year	2052
Cost	$10,207.18

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	33 Years
Renewal Year	2057
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$816.57

Description

The plumbing fixtures include a floor-mounted composite toilet.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Genricks Lake Beach - D201001

Genricks Lake Beach - D201001

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$979.89

Description

The building sanitary waste drainage, where visible, consists of a PVC pipe vent line for the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Genricks Lake Beach - D203001

G Building Sitework
G30 Site Mechanical Utilities

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$51,199.20

Description
The building site includes a septic system comprising an underground concrete septic tank.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

7 GORMAN LAKE BEACH

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Gorman Lake Beach

Version
Final

Date
February 01, 2024

Prepared by:
Roth IAMS Ltd.
Project No. -
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Gorman Lake Beach building, located at 3404 Letterkenny Rd, Palmer Rapids, ON, was reportedly constructed in 2018. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 12 SM (128 SF). The structure is used as Washroom and changing room. The Building Assessment was undertaken on May 19, 2023.

Facility No	GLBE
Name	Gorman Lake Beach
Address	3404 Letterkenny Rd - Palmer Rapids - ON - Canada
Area	128 SM
Floors	1
Year Constructed	2018
Condition Assessment Date	May 19, 2023
Replacement value	$0.00
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Gorman Lake Beach, located at 3404 Letterkenny Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 19, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A103001 - Slab on Grade - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	70 Years
Renewal Year	2093
Quantity / Unit of Measure	12 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	3.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$5,193.41

Description
Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible. The slab presumably includes an integrated below grade chamber for sanitary waste.

Condition Narrative
No major deficiencies were observed or reported. No cracking in concrete was observed.

Photos

Gorman Lake Beach - A103001


Gorman Lake Beach - A103001

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	70 Years
Renewal Year	2093
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,499.93

Description
At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely load bearing wood column walls and beams supporting a wood roof joist and rafter system.

Condition Narrative
No significant deficiencies were observed or reported.

Photos


Gorman Lake Beach - A103001


Gorman Lake Beach - A103001

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	45 Years
Renewal Year	2068
Quantity / Unit of Measure	4 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$756.69

Description

Exterior soffits are covered with perforated aluminum panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Gorman Lake Beach - B201008

Gorman Lake Beach - B201008

Element Description	
Name	B201024 - Metal Cladding - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	35 Years
Renewal Year	2058
Quantity / Unit of Measure	36 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$9,847.88

Description

Exterior wall surfaces include prefinished metal siding with a vertical clapboard surface profile.

Condition Narrative

No significant deficiencies were observed or reported. Impact damage on the front exterior wall was observed and should be monistored. Replacement is not anticipated in the short term.

Photos

Gorman Lake Beach - B201024

Gorman Lake Beach - B201024

Gorman Lake Beach - B201024

Element Description	
Name	B203023 - Single Door - Hollow Metal - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	25 Years
Renewal Year	2048
Quantity / Unit of Measure	2 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,942.09

Description

Exterior single-door assemblies include painted steel panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Gorman Lake Beach - B203023

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2048
Cost	$10,942.09

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	35 Years
Renewal Year	2058
Quantity / Unit of Measure	14 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$7,583.25

Description

Pitched roof surfaces are covered with prefinished metal roofing panels that include exposed fasteners.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Gorman Lake Beach - B102001

C Interiors
C30 Interior Finishes

Element Description	
Name	C301099 - Other Wall Finishes - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	25 Years
Renewal Year	2048
Quantity / Unit of Measure	1 / Lump Sum
Unit Cost	$5,000.00
Difficulty / Regional / Soft Cost / Replacement	1.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,207.18

Description
Wall and ceiling surfaces are covered with prefinished metal siding and trim.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Gorman Lake Beach - C301099


Gorman Lake Beach - C301099


Gorman Lake Beach - C301099

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	30 Years
Renewal Year	2053
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$816.57

Description

The plumbing fixtures include a floor-mounted composite toilet.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Gorman Lake Beach - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2053
Cost	$816.57

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	45 Years
Renewal Year	2068
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$979.89

Description

The building sanitary waste drainage, where visible, consists of a PVC pipe vent line for the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Gorman Lake Beach - D203001

G Building Sitework
G30 Site Mechanical Utilities

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Washroom/Changeroom
Installation Year	2018
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	45 Years
Renewal Year	2068
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$51,199.20

Description
The building site includes a septic system comprising an underground concrete septic tank.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

8 HARDWOOD LAKE FIRE HALL #2

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Hardwood Lake Fire Hall #2

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Hardwood Fire Hall #4 building, located at 38713 Hwy 28, Palmer Rapids, ON, was reportedly constructed in 1992 with an addition constructed in 2004. The building is a single-storey structure without a basement with a reported gross floor area of approximately 125 SM (1344 SF). For the purpose of reporting, systems from the building addition are included with the systems form the original building. The building is used as a fire station. The Building Assessment was undertaken on May 17, 2023.

Facility No	HLFH
Name	Hardwood Lake Fire Hall #2
Address	38713 Hwy 28 - Palmer Rapids - ON - Canada
Area	1344 SM
Floors	1
Year Constructed	1992
Condition Assessment Date	April 06, 2023
Replacement value	$706,034.59
3 Year FCI	1.4%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Hardwood Lake Fire Hall #2, located at 38713 Hwy 28 - Palmer Rapids - ON - Canada.

The site visit was undertaken on April 06, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A101001 - Standard Foundations - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	45 / LM Footprint
Unit Cost	$1,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$89,414.02

Description
Based on the information gathered during the assessment, the foundations are standard shallow foundations bearing on good native soil. Due to the hidden nature of the building's foundations, a visual site confirmation of the foundation type was not possible.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Element Description	
Name	A103001 - Slab on Grade - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	126 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$18,176.77

Description

Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel.

Condition Narrative

Some minor isolated cracking was observed, no significant elevation difference to suggest differential settlement of the concrete slab-on-grade was noted. However, the cracks are recommended to be monitored and should a significant magnitude change be noted, a structural engineer should be retained.

Photos

Hardwood Lake Fire Hall #2 - A103001

Hardwood Lake Fire Hall #2 - A103001

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	125 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$67,706.96

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building overall structure consists wood stud load-bearing walls, wood beams and joists supporting a sloped wood roof deck.

Condition Narrative

No major deficiencies were observed or reported on the exposed structural framing system.

Photos

Hardwood Lake Fire Hall #2 - B103001

Hardwood Lake Fire Hall #2 - B103001

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	45 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,512.70

Description

Exterior soffits are covered with perforated, prefinished aluminum panels .

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - B201008

Hardwood Lake Fire Hall #2 - B201008

Hardwood Lake Fire Hall #2 - B201008

Recommendations

Recommendations #1 - Exterior Soffits	
Type	Life Cycle Replacement
Year	2042
Cost	$8,512.70

Element Description	
Name	B201025 - Vinyl Siding - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	180 / SM
Unit Cost	$107.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$26,211.78

Description

Exterior wall surfaces are clad with vinyl siding.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - B201025

Hardwood Lake Fire Hall #2 - B201025

Hardwood Lake Fire Hall #2 - B201025

Recommendations

Recommendations #1 - Vinyl Siding	
Type	Life Cycle Replacement
Year	2029
Cost	$26,211.78

Element Description	
Name	B202001 - Windows - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	15 Years
Renewal Year	2039
Quantity / Unit of Measure	6 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,798.80

Description

Exterior windows are insulated glazing units set in fixed frames with operable sashes.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2039
Cost	$9,798.80

Element Description	
Name	B203022 - Overhead Doors - Industrial - Firehall (Township)
Installation Year	2020
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	1 / Each
Unit Cost	$15,070.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$20,509.43

Description

A sectional panel overhead door is provided on the building exterior.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - B203022

Hardwood Lake Fire Hall #2 - B203022

Recommendations

Recommendations #1 - Overhead Doors - Industrial	
Type	Life Cycle Replacement
Year	2045
Cost	$20,509.43

Element Description	
Name	B203024 - Single Door - Wood - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,254.42

Description

Exterior single-door assemblies include painted steel clad wood panels that are set within painted wood frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - C102021

Hardwood Lake Fire Hall #2 - C102021

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2029
Cost	$9,254.42

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	150 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$81,248.36

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - B301027

Hardwood Lake Fire Hall #2 - B301027

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2032
Cost	$81,248.36

C Interiors
C10 Interior Construction

Element Description	
Name	C101001 - Fixed Partitions - Firehall (Township)
Installation Year	2004
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	55 Years
Renewal Year	2079
Quantity / Unit of Measure	20 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,837.86

Description
Interior fixed partitions include gypsum board.

Condition Narrative
No significant deficiencies were observed or reported. Some impact damage was observed and should be repaired as part of maintenance. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - C101001


Hardwood Lake Fire Hall #2 - C101001

C30 Interior Finishes

Element Description	
Name	C301005 - Paint Wall Covering - Firehall (Township)
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	10 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	125 / SM Building
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,016.25

Description

A paint finish is applied to most wall surfaces in the building.

Condition Narrative

Deficiencies observed or reported during the assessment include staining, discoloration and fading. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - C301005

Hardwood Lake Fire Hall #2 - C301005

Hardwood Lake Fire Hall #2 - C301005

Recommendations

Recommendations #1 - Paint Wall Covering	
Type	Life Cycle Replacement
Year	2026
Cost	$9,016.25

Element Description	
Name	C302007 - Painted / Sealed Floor - Firehall (Township)
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	15 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	15 / SM
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,081.95

Description

A painted/sealed floor is applied in the building.

Condition Narrative

Deficiencies observed or reported during the assessment include stained and worn sealant. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - C302007

Recommendations

Recommendations #1 - Painted / Sealed Floor	
Type	Life Cycle Replacement
Year	2026
Cost	$1,081.95

Element Description	
Name	C303006 - Painted Ceiling Structures - Firehall (Township)
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	15 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	125 / SM
Unit Cost	$38.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,464.48

Description

A paint application is provided on gypsum board ceilings.

Condition Narrative

Deficiencies observed or reported during the assessment include staining, discoloration and fading. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - C303006

Hardwood Lake Fire Hall #2 - C303006

Recommendations

Recommendations #1 - Painted Ceiling Structures	
Type	Life Cycle Replacement
Year	2026
Cost	$6,464.48

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Firehall (Township)
Installation Year	1992
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

Description

The plumbing fixtures include a floor-mounted vitreous china water closet. The water closet is equipped with a manual flush device.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include stains. Replacement is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2024
Cost	$1,633.13

Element Description	
Name	D201003 - Lavatories - Firehall (Township)
Installation Year	2004
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	15 Years
Renewal Year	2039
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

Description

The plumbing fixtures include a vitreous china lavatory. The lavatory is equipped with a manual tap set.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D201003

Recommendations

Recommendations #1 - Lavatories	
Type	Life Cycle Replacement
Year	2039
Cost	$1,633.13

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	125 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,207.08

Description

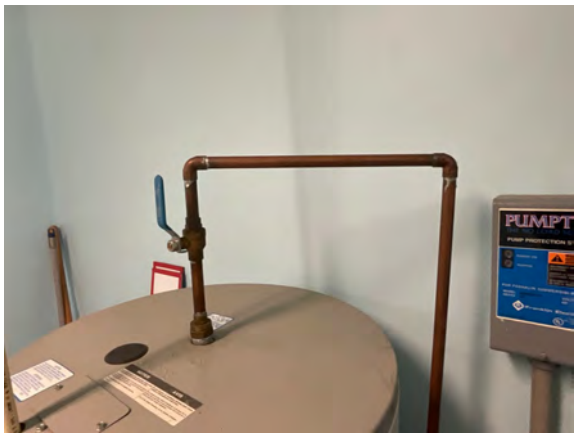
The building domestic water distribution, where visible, consists of cold and hot water copper and PVC pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D202001



Hardwood Lake Fire Hall #2 - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2032
Cost	$10,207.08

Element Description	
Name	D202008 - Domestic Water Expansion Tanks/Pressure Tanks - Firehall (Township)
Installation Year	2005
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,590.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,246.73

Description

The domestic water distribution includes a well water pressure tank with regulator. The tank is manufactured by Wellrite and is located in the mechanical room.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Hardwood Lake Fire Hall #2 - D202021

Hardwood Lake Fire Hall #2 - D202021

Hardwood Lake Fire Hall #2 - D202021

Recommendations

Recommendations #1 - Domestic Water Expansion Tanks/Pressure Tanks	
Type	Life Cycle Replacement
Year	2035
Cost	$6,246.73

Element Description	
Name	D202035 - Domestic Water Heaters - Residential Electric - Firehall (Township)
Installation Year	2003
Condition	4 - Poor
Expected Useful Life	12 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	184 / Liter
Unit Cost	$32.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,013.24

Description

The domestic water distribution includes a residential-grade electric domestic hot water heater. The water heater has an input heating capacity of 30 kW and a storage capacity of 184 L. The unit is manufactured by GSW, model 6G50SDEB1, serial number S0603526469, and is located in the mechanical room.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - D202034

Hardwood Lake Fire Hall #2 - D202034

Recommendations

Recommendations #1 - Domestic Water Heaters - Residential Electric	
Type	Life Cycle Replacement
Year	2024
Cost	$8,013.24

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	125 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,207.08

Description

The building sanitary waste drainage, where visible, consists of rigid plastic pipe drain lines and risers. The drainage includes pipe vents, traps, and floor drains. The sanitary waste drainage connects to the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2042
Cost	$10,207.08

D30 HVAC

Element Description	
Name	D301002 - Natural Gas Supply Piping and Fittings - Propane Supply - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	125 / SM
Unit Cost	$30.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,103.54

Description

The building propane supply consists of steel piping and fittings from the storage tank to the gas-fired equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D301002

Hardwood Lake Fire Hall #2 - D301002

Hardwood Lake Fire Hall #2 - D301002

Hardwood Lake Fire Hall #2 - D301002

Recommendations

Recommendations #1 - Natural Gas Supply Piping and Fittings	
Type	Life Cycle Replacement
Year	2032
Cost	$5,103.54

Element Description	
Name	D302032 - Fuel-Fired Radiant Tube Heaters - Firehall (Township)
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	18 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	1 / Each
Unit Cost	$6,570.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,941.40

Description

Building heating consists of a propane-fired radiant tube heater. The unit is located at ceiling height. No visual nameplate was available to note the manufacturing name or MBH.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - D302032

Hardwood Lake Fire Hall #2 - D302032

Recommendations

Recommendations #1 - Fuel-Fired Radiant Tube Heaters	
Type	Life Cycle Replacement
Year	2026
Cost	$8,941.40

Element Description	
Name	D305010 - Electric Baseboard Heaters - Firehall (Township)
Installation Year	2004
Condition	3 - Fair
Expected Useful Life	18 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	2 / Each
Unit Cost	$360.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$979.88

Description

The building HVAC includes perimeter electric baseboard heaters. The units are located in the office and washroom.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - D305010

Hardwood Lake Fire Hall #2 - D305010

Recommendations

Recommendations #1 - Electric Baseboard Heaters	
Type	Life Cycle Replacement
Year	2026
Cost	$979.88

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Firehall (Township)
Installation Year	2017
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$702.25

Description

ABC Type Fire Extinguishers are located in the common area space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D403002

Hardwood Lake Fire Hall #2 - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$702.25

D50 Electrical

Element Description	
Name	D501024 - Main Service Panels - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	1 / Each
Unit Cost	$16,330.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,224.22

Description

The electrical service includes a main service panelboard identified as the main service disconnect. The panelboard is rated 225 A at 120/240V and is located in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D501003

Recommendations

Recommendations #1 - Main Service Panels	
Type	Life Cycle Replacement
Year	2032
Cost	$22,224.22

Element Description	
Name	D501033 - Panelboards Residential - Firehall (Township)
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,510.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,110.05

Description

The electrical service includes panelboards rated 100A at 120/240V and are located in the hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D501025

Hardwood Lake Fire Hall #2 - D501025

Recommendations

Recommendations #1 - Panelboards Residential	
Type	Life Cycle Replacement
Year	2032
Cost	$4,110.05

Element Description	
Name	D502001 - Branch Wiring and Devices - Firehall (Township)
Installation Year	2004
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	30 Years
Renewal Year	2054
Quantity / Unit of Measure	125 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$23,986.64

Description

The building branch wiring consists of insulated copper wire in rigid metal conduit and flexible armored cable. The wiring includes junction boxes, devices, switches and receptacles.

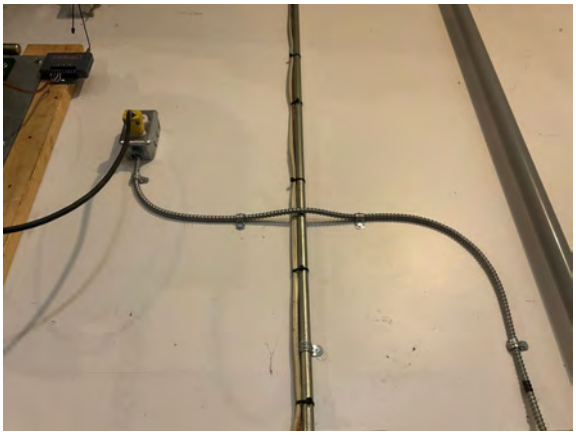
Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D502001

Hardwood Lake Fire Hall #2 - D502001



Hardwood Lake Fire Hall #2 - D502001

Hardwood Lake Fire Hall #2 - D502001

Element Description	
Name	D502021 - Interior Lighting Residential - Firehall (Township)
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	3 Years
Renewal Year	2027
Quantity / Unit of Measure	125 / SM
Unit Cost	$35.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,954.13

Description

The building's interior lighting consists of linear light fixtures and Incandescent light bulbs in the main hall. Linear fixtures are T8.

Condition Narrative

No significant deficiencies were observed or reported. Some of the lighting was updated over time. However, the lighting is energy inefficient. Replacement or upgrade to LED is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - D502002

Hardwood Lake Fire Hall #2 - D502002

Hardwood Lake Fire Hall #2 - D502002

Hardwood Lake Fire Hall #2 - D502002

Recommendations

Recommendations #1 - Interior Lighting Residential	
Type	Life Cycle Replacement
Year	2027
Cost	$5,954.13

Element Description	
Name	D502041 - Exterior Lighting - Firehall (Township)
Installation Year	2022
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	2 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,562.36

Description

The building exterior lighting consists of wall-pack mounted fixtures along the perimeter of the building and canopy pot light fixtures at entrances. The wall fixtures are LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - D502041

Hardwood Lake Fire Hall #2 - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2042
Cost	$1,562.36

G Building Sitework
G20 Site Improvements

Element Description	
Name	G204081 - Message Sign - Wall-Mounted - Firehall (Township)
Installation Year	2017
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	13 Years
Renewal Year	2037
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,500.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,041.42

Description
Message signs consist of a main building identification sign.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Hardwood Lake Fire Hall #2 - C103021

Recommendations

Recommendations #1 - Message Sign - Wall-Mounted	
Type	Life Cycle Replacement
Year	2029
Cost	$2,041.42

G30 Site Mechanical Utilities

Element Description	
Name	G301001 - Well Systems - Firehall (Township)
Installation Year	2002
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	28 Years
Renewal Year	2052
Quantity / Unit of Measure	1 / Each
Unit Cost	$127,770.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$173,887.81

Description

The site includes a drilled well for water supply from an aquifer. The well is assumed to consist of a metal casing with a well screen and drop pipe for the submersible pump.

Condition Narrative

The well is concealed below ground and cannot be fully assessed via visual means. However, no significant deficiencies were reported. Replacement is not anticipated in the short term. OR Deficiencies observed or reported at the time of the assessment include maintenance issues /poor performance /failure. Replacement is recommended in the short term.

Photos

Hardwood Lake Fire Hall #2 - G301001

Recommendations

Recommendations #1 - Well Systems	
Type	Life Cycle Replacement
Year	2052
Cost	$173,887.81

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Firehall (Township)
Installation Year	2004
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	30 Years
Renewal Year	2054
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,198.71

Description

The building site includes a septic system comprising an underground concrete septic tank presumably connected to a drain field.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

G40 Site Electrical Utilities

Element Description	
Name	G401010 - Electrical Service Single Phase - Firehall (Township)
Installation Year	2004
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	30 Years
Renewal Year	2054
Quantity / Unit of Measure	40 / LM
Unit Cost	$297.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$16,168.01

Description

The overhead electrical service is assumed to be equivalent to 200A 3 wire single phase from the utility to the building electrical service equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Hardwood Lake Fire Hall #2 - G401010

9 KAUFFELDT LAKE BEACH

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Kauffeldt Lake Beach

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Kauffeldt Lake Beach building, located at 59 Lily Pad Rd, Palmer Rapids, ON, was reportedly constructed in 2022. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 12 SM (128 SF). The structure is used as a washroom and changing room. The Building Assessment was undertaken on May 17, 2023.

Facility No	KLB1
Name	Kauffeldt Lake Beach
Address	59 Lily Pad Rd - Palmer Rapids - ON - Canada
Area	128 SM
Floors	1
Year Constructed	2022
Condition Assessment Date	May 17, 2023
Replacement value	$104,026.09
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Kauffeldt Lake Beach, located at 59 Lily Pad Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 17, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A103001 - Slab on Grade - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	73 Years
Renewal Year	2097
Quantity / Unit of Measure	12 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	3.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$5,193.41

Description
Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible. The slab presumably includes an integrated below grade chamber for sanitary waste.

Condition Narrative
No major deficiencies were observed or reported. No cracking in concrete was observed.

Photos


Kauffeldt Lake Beach - A103001

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	73 Years
Renewal Year	2097
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,499.93

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely load bearing wood column walls and beams supporting a wood roof joist and rafter system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Kauffeldt Lake Beach - B201010

Kauffeldt Lake Beach - B103001

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	4 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$756.69

Description

Exterior soffits are covered with perforated aluminum panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Kauffeldt Lake Beach - B201008

Kauffeldt Lake Beach - B201008

Element Description	
Name	B201024 - Metal Cladding - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	36 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$9,847.88

Description

Exterior wall surfaces include prefinished metal siding with a vertical clapboard surface profile.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Kauffeldt Lake Beach - B201024

Kauffeldt Lake Beach - B201024

Element Description	
Name	B203023 - Single Door - Hollow Metal - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	2 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,942.09

Description

Exterior single-door assemblies include painted steel panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Kauffeldt Lake Beach - C102021

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	14 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$7,583.25

Description

Pitched roof surfaces are covered with prefinished metal roofing panels that include exposed fasteners.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Kauffeldt Lake Beach - B301028

Kauffeldt Lake Beach - B301028

C Interiors
C30 Interior Finishes

Element Description	
Name	C301099 - Other Wall Finishes - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	28 Years
Renewal Year	2052
Quantity / Unit of Measure	1 / Lump Sum
Unit Cost	$5,000.00
Difficulty / Regional / Soft Cost / Replacement	1.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,207.18

Description
Wall and ceiling surfaces are covered with prefinished metal siding and trim.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Kauffeldt Lake Beach - C301099


Kauffeldt Lake Beach - C301099


Kauffeldt Lake Beach - C301099

Recommendations

Recommendations #1 - Other Wall Finishes	
Type	Life Cycle Replacement
Year	2052
Cost	$10,207.18

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	33 Years
Renewal Year	2057
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$816.57

Description

The plumbing fixtures include a floor-mounted composite toilet.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Kauffeldt Lake Beach - D201001

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$979.89

Description

The building sanitary waste drainage, where visible, consists of a PVC pipe vent line for the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Kauffeldt Lake Beach - D203001

G Building Sitework
G30 Site Mechanical Utilities

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$51,199.20

Description
The building site includes a septic system comprising an underground concrete septic tank.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

10 LYNDOCH TRANSFER STATION

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Lyndoch Transfer Station

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Lyndoch Transfer Station building, located at 876 Addinton Rd, Palmer Rapids, ON, was reportedly constructed in 2018. The building is a single-storey structure with a reported gross floor area of approximately 6 SM (64 SF). The structure is used as a warming shack. The Building Assessment was undertaken on May 17, 2023.

Facility No	LTS1
Name	Lyndoch Transfer Station
Address	876 Addinton Rd - Palmer Rapids - ON - Canada
Area	64 SM
Floors	1
Year Constructed	2018
Condition Assessment Date	May 17, 2023
Replacement value	$26,878.92
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Lyndoch Transfer Station, located at 876 Addinton Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 17, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	69 Years
Renewal Year	2093
Quantity / Unit of Measure	6 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,249.97

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely a wood joist floor supported on wood blocks, and load bearing wood stud walls supporting a roof deck with roof sheathing.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - A103001

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	44 Years
Renewal Year	2068
Quantity / Unit of Measure	2 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$378.35

Description

Exterior soffits are covered with perforated metal panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - B201008

Lyndoch Transfer Station - B201008

Element Description	
Name	B201024 - Metal Cladding - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	18 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,923.94

Description

Exterior wall surfaces include prefinished metal siding with a vertical ribbed surface profile.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - B201024

Lyndoch Transfer Station - B201024

Element Description	
Name	B202001 - Windows - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	1 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,633.15

Description

Exterior windows are single-paned glazing units set in operable frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - B202001

Lyndoch Transfer Station - B202001

Lyndoch Transfer Station - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2053
Cost	$1,633.15

Element Description	
Name	B203024 - Single Door - Wood - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,627.25

Description

Exterior single-door assemblies include a painted steel clad wood panel that is set within a painted wood frame.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - B203024

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2048
Cost	$4,627.25

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	7 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,791.63

Description

Pitched roof surfaces are covered with prefinished metal roofing panels that include exposed fasteners.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - B301028

D Services
D30 HVAC

Element Description	
Name	D301002 - Natural Gas Supply Piping and Fittings - Propane Supply - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	6 / SM
Unit Cost	$30.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$244.97

Description

The building propane supply consists of Polyethylene Gas tube piping and fittings from the storage tank to the gas-fired equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - D301002

Element Description	
Name	D302004 - Fuel-Fired Unit Heaters - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	12 Years
Renewal Year	2036
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,940.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$2,681.09

Description

Building heating includes a natural gas-fired unit heater, with a heating capacity of approximately 10 MBH.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - D302004

Recommendations

Recommendations #1 - Fuel-Fired Unit Heaters	
Type	Life Cycle Replacement
Year	2036
Cost	$2,681.09

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$351.13

Description

An ABC Type Fire Extinguisher is located next to the entrance space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$351.13

D50 Electrical

Element Description	
Name	D503009 - Video Surveillance Systems - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	14 Years
Renewal Year	2038
Quantity / Unit of Measure	6 / SM Building
Unit Cost	$22.00
Difficulty / Regional / Soft Cost / Replacement	6.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,077.88

Description

The building includes a video surveillance system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - G403099

Recommendations

Recommendations #1 - Video Surveillance Systems	
Type	Life Cycle Replacement
Year	2038
Cost	$1,077.88

G Building Sitework
G40 Site Electrical Utilities

Element Description	
Name	G402017 - Flood and Field Light Fixtures - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,440.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,919.56

Description

The building exterior lighting consists of pole mounted flood light fixtures. The fixtures are LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Lyndoch Transfer Station - D502041

Recommendations

Recommendations #1 - Flood and Field Light Fixtures	
Type	Life Cycle Replacement
Year	2043
Cost	$3,919.56

11 PALMER FIRE HALL 1

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Palmer Fire Hall 1

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Palmer Fire Hall #1 building, located at 42 Burnt Bridge Rd., Palmer Rapids, ON, was reportedly constructed in 1960 and added a section in 2000. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 204 SM (2196 SF). The Building Assessment was undertaken on May 16, 2023.

Facility No	PFH
Name	Palmer Fire Hall 1
Address	42 Burnt Bridge Rd - Palmer Rapids - ON - Canada
Area	2196 SM
Floors	1
Year Constructed	1960
Condition Assessment Date	April 05, 2023
Replacement value	$911,953.32
3 Year FCI	10.6%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Palmer Fire Hall 1, located at 42 Burnt Bridge Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on April 05, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A101001 - Standard Foundations - Firehall (Township)
Installation Year	1960
Condition	3 - Fair
Expected Useful Life	75 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	60 / LM Footprint
Unit Cost	$1,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$119,218.69

Description
Based on the information gathered during the assessment, the foundations are standard deep foundations bearing on good native soil. Due to the hidden nature of the building's foundations, a visual site confirmation of the foundation type was not possible.

Condition Narrative
Deficiencies observed include cracks and spalling on the foundation walls. Cracks on exterior wall may suggest the foundation is settling. A study to determine the integrity of the foundation with a repair based on the outcome of the study is recommended.

Photos

Palmer Fire Hall 1 - A101001


Palmer Fire Hall 1 - A101001

Recommendations

Recommendations #1 - Standard Foundations	
Type	Engineering Study
Year	2023
Cost	$10,000.00

Recommendations #2 - Standard Foundations	
Type	Major Repair
Year	2023

Recommendations #3 - Standard Foundations	
Type	Life Cycle Replacement
Year	2035
Cost	$119,218.69

Element Description	
Name	A103001 - Slab on Grade - Firehall (Township)
Installation Year	1960
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	204 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$29,429.05

Description

Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel.

Condition Narrative

Some minor isolated cracking was observed, no significant elevation difference to suggest differential settlement of the concrete slab-on-grade was noted. The cracks should be monitored and should a significant magnitude change be noted, a structural engineer should be retained.

Photos

Palmer Fire Hall 1 - A103001

Palmer Fire Hall 1 - A103001

Palmer Fire Hall 1 - A103001

Recommendations

Recommendations #1 - Slab on Grade	
Type	Life Cycle Replacement
Year	2035
Cost	$29,429.05

B Shell
B10 Superstructure

Element Description	
Name	B102004 - Canopy - Firehall (Township)
Installation Year	1999
Condition	3 - Fair
Expected Useful Life	50 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	2 / SM
Unit Cost	$43.78
Difficulty / Regional / Soft Cost / Replacement	5.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$595.82

Description

The building exterior includes a canopy structure consisting of a wood framed canopy with a metal shingled roof.

Condition Narrative

Deficiencies observed during the assessment include wood rot and water stains. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - B201008

Palmer Fire Hall 1 - B201008

Recommendations

Recommendations #1 - Canopy	
Type	Life Cycle Replacement
Year	2026
Cost	$595.82

Element Description	
Name	B103001 - Structure - Firehall (Township)
Installation Year	1960
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	204 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$110,497.77

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building overall structure consists concrete masonry unit (CMU) load-bearing walls, wood beams and joists supporting a wood floor deck and sloped wood roof deck.

Condition Narrative

No major deficiencies were observed or reported on the exposed structural framing system. Some wood water stains were observed.

Photos

Palmer Fire Hall 1 - B103001

Palmer Fire Hall 1 - B103001

Palmer Fire Hall 1 - B103001

Recommendations

Recommendations #1 - Structure	
Type	Life Cycle Replacement
Year	2035
Cost	$110,497.77

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	60 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,350.27

Description
Exterior soffits are covered with perforated, prefinished metal panels.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - B201008


Palmer Fire Hall 1 - B201008

Recommendations

Recommendations #1 - Exterior Soffits	
Type	Life Cycle Replacement
Year	2049
Cost	$11,350.27

Element Description	
Name	B201010 - Exterior Coatings/Paint - Firehall (Township)
Installation Year	1960
Condition	4 - Poor
Expected Useful Life	10 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	240 / SM
Unit Cost	$46.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$15,024.82

Description

A paint finish is applied to exterior wall surfaces.

Condition Narrative

Deficiencies observed or reported during the assessment include peeling surfaces, staining, fading, and scuffing. The deterioration is anticipated to progress due to age and exposure to the elements. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - B201021

Palmer Fire Hall 1 - B201021

Palmer Fire Hall 1 - B201021

Palmer Fire Hall 1 - B201021

Recommendations

Recommendations #1 - Exterior Coatings/Paint	
Type	Life Cycle Replacement
Year	2024
Cost	$15,024.82

Element Description	
Name	B201024 - Metal Cladding - Firehall (Township)
Installation Year	1960
Condition	4 - Poor
Expected Useful Life	40 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	15 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,103.25

Description

Exterior wall surfaces include metal siding panels.

Condition Narrative

Deficiencies observed or reported during the assessment include corrosion, damage and deformation and peeling paint. The deterioration is anticipated to progress due to age and exposure to the elements. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - B201024

Palmer Fire Hall 1 - B201024

Recommendations

Recommendations #1 - Metal Cladding	
Type	Life Cycle Replacement
Year	2024
Cost	$4,103.25

Element Description	
Name	B201025 - Vinyl Siding - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	16 / SM
Unit Cost	$107.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,329.94

Description

Exterior wall surfaces are clad with vinyl siding.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - B201025

Recommendations

Recommendations #1 - Vinyl Siding	
Type	Life Cycle Replacement
Year	2029
Cost	$2,329.94

Element Description	
Name	B201026 - Wood Siding - Firehall (Township)
Installation Year	1999
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Year
Renewal Year	2023
Quantity / Unit of Measure	10 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,429.58

Description

Exterior wall surfaces are clad with wood siding with an asphaltic layer.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged and missing surfaces, wood rot, loose components. The deterioration is anticipated to progress. Moisture infiltration appears to have occurred. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - B201026

Palmer Fire Hall 1 - B201026

Recommendations

Recommendations #1 - Wood Siding	
Type	Life Cycle Replacement
Year	2023
Cost	$3,429.58

Element Description	
Name	B202001 - Windows - Firehall (Township)
Installation Year	1999
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	10 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$16,331.33

Description

Exterior windows are insulated glazing units set in fixed frames with operable sashes.

Condition Narrative

Deficiencies observed or reported during the assessment include wood rot, air, and water infiltration, and peeling paint. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - B202001

Palmer Fire Hall 1 - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2024
Cost	$16,331.33

Element Description	
Name	B203022 - Overhead Doors - Industrial - Firehall (Township)
Installation Year	2021
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	22 Years
Renewal Year	2046
Quantity / Unit of Measure	2 / Each
Unit Cost	$15,070.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$41,018.85

Description

Sectional panel overhead doors are provided on the building exterior.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - B203022

Palmer Fire Hall 1 - B203022

Recommendations

Recommendations #1 - Overhead Doors - Industrial	
Type	Life Cycle Replacement
Year	2046
Cost	$41,018.85

Element Description	
Name	B203023 - Single Door - Hollow Metal - Firehall (Township)
Installation Year	2017
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	23 Years
Renewal Year	2047
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,470.99

Description

Exterior single-door assemblies include painted steel panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - B203023

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2047
Cost	$5,470.99

Element Description	
Name	B203024 - Single Door - Wood - Firehall (Township)
Installation Year	1999
Condition	4 - Poor
Expected Useful Life	25 Years
Remaining Useful Life	0 Year
Renewal Year	2023
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,627.21

Description

Exterior single-door assemblies include painted wood panels that are set within painted steel frames.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged surfaces, air or moisture leakage, worn hardware. The deterioration is anticipated to progress Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - B203024

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2023
Cost	$4,627.21

Element Description	
Name	B203027 - Double Door - Wood - Firehall (Township)
Installation Year	1960
Condition	4 - Poor
Expected Useful Life	25 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$6,270.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,533.12

Description

Exterior double-door assemblies include painted wood panels that are set within painted steel frames.

Condition Narrative

Deficiencies observed or reported during the assessment include delaminated surfaces, air or moisture leakage, worn hardware. The deterioration is anticipated to progress Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - C102025

Recommendations

Recommendations #1 - Double Door - Wood	
Type	Life Cycle Replacement
Year	2024
Cost	$8,533.12

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	15 Years
Renewal Year	2039
Quantity / Unit of Measure	245 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$132,705.65

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - B301028

Palmer Fire Hall 1 - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2039
Cost	$132,705.65

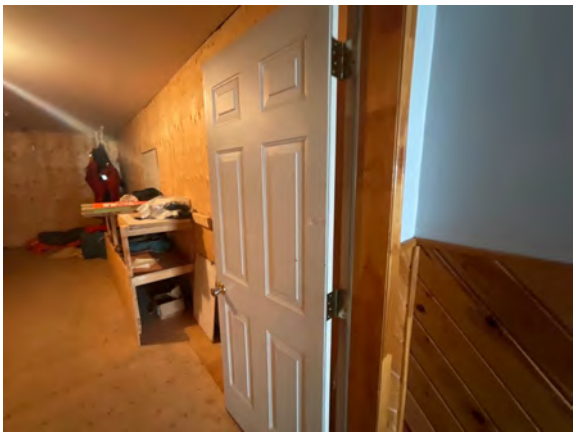
C Interiors
C10 Interior Construction

Element Description	
Name	C102022 - Single Door - Wood - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	15 Years
Renewal Year	2039
Quantity / Unit of Measure	2 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,859.16

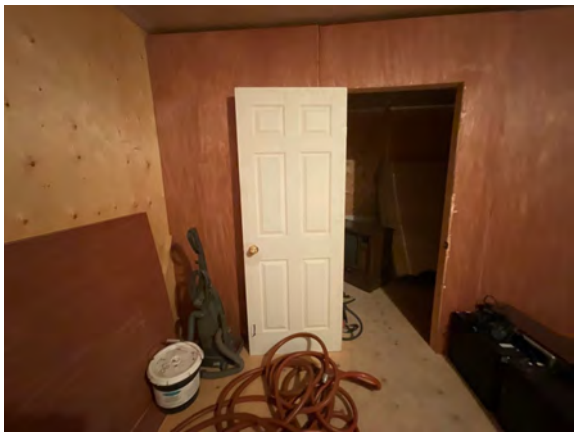
Description
Interior single-door assemblies include wood panels that are set within steel frames.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Fire Hall 1 - C102022



Palmer Fire Hall 1 - C102022

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2039
Cost	$6,859.16

C20 Stairs

Element Description	
Name	C201001 - Interior Stair Construction - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	50 Years
Renewal Year	2074
Quantity / Unit of Measure	14 / Per Riser
Unit Cost	$1,140.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$21,720.67

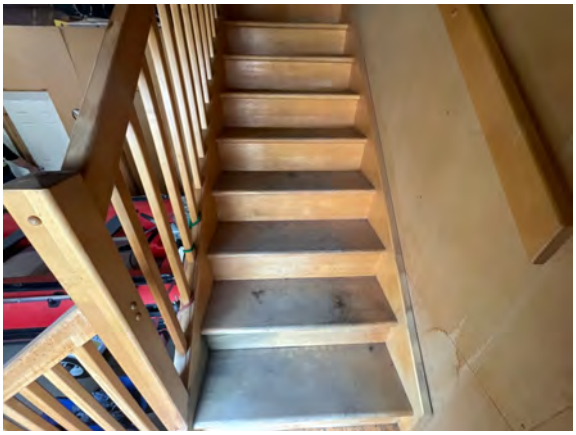
Description

Interior wood stairs provide access between floor levels.

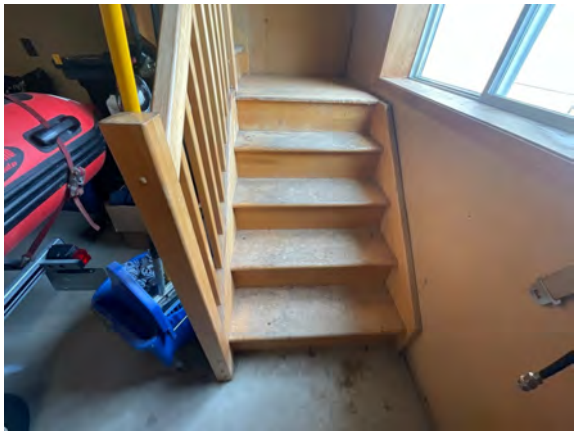
Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Fire Hall 1 - C201001



Palmer Fire Hall 1 - C201001

Recommendations

Recommendations #1 - Interior Stair Construction	
Type	Life Cycle Replacement
Year	2074
Cost	$21,720.67

Element Description	
Name	C201002 - Exterior Stair Construction - Firehall (Township)
Installation Year	1999
Condition	4 - Poor
Expected Useful Life	40 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	4 / Per Riser
Unit Cost	$1,260.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,859.16

Description

Exterior metal stairs provide access between the exterior exhaust and grade level.

Condition Narrative

Deficiencies observed or reported during the assessment include corrosion, wear, and inadequate guards. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - C201002

Recommendations

Recommendations #1 - Exterior Stair Construction	
Type	Life Cycle Replacement
Year	2024
Cost	$6,859.16

C30 Interior Finishes

Element Description	
Name	C301005 - Paint Wall Covering - Firehall (Township)
Installation Year	2000
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	70 / SM Building
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,049.10

Description

A paint finish is applied to Mezzanine wall surfaces in the building.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Palmer Fire Hall 1 - C301005

Recommendations

Recommendations #1 - Paint Wall Covering	
Type	Life Cycle Replacement
Year	2029
Cost	$5,049.10

Element Description	
Name	C301022 - Wood Wall Finish - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	70 / SM
Unit Cost	$340.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$32,390.47

Description

Wall surfaces are provided with a wood finish.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Palmer Fire Hall 1 - C301022

Palmer Fire Hall 1 - C301022

Recommendations

Recommendations #1 - Wood Wall Finish	
Type	Life Cycle Replacement
Year	2029
Cost	$32,390.47

Element Description	
Name	C302007 - Painted / Sealed Floor - Firehall (Township)
Installation Year	2000
Condition	3 - Fair
Expected Useful Life	15 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	70 / SM
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,049.10

Description

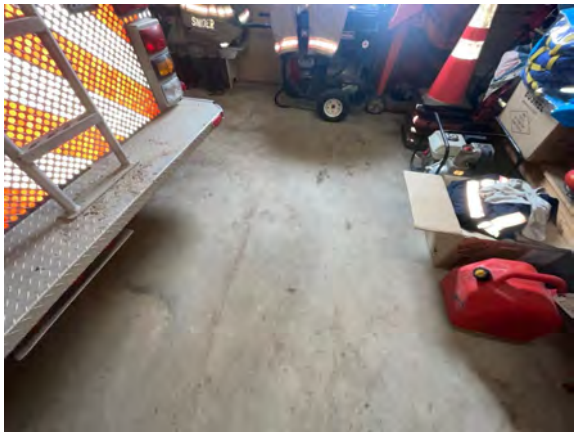
A painted/sealed floor is applied in the garage area.

Condition Narrative

Deficiencies observed or reported during the assessment include stained and worn sealant. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - C302007



Palmer Fire Hall 1 - C302007

Recommendations

Recommendations #1 - Painted / Sealed Floor	
Type	Life Cycle Replacement
Year	2026
Cost	$5,049.10

Element Description	
Name	C302022 - Vinyl Tile / Plank Floor - Firehall (Township)
Installation Year	1999
Condition	4 - Poor
Expected Useful Life	15 Years
Remaining Useful Life	1 Year
Renewal Year	2025
Quantity / Unit of Measure	204 / SM
Unit Cost	$132.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$36,647.50

Description

Interior floor surfaces are finished with vinyl tiles.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged and worn surfaces, and stains .The deterioration is anticipated to progress due to age and ongoing building activities. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - C302023

Palmer Fire Hall 1 - C302023

Recommendations

Recommendations #1 - Vinyl Tile / Plank Floor	
Type	Life Cycle Replacement
Year	2025
Cost	$36,647.50

Element Description	
Name	C303005 - Wood Ceiling - Firehall (Township)
Installation Year	1960
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	70 / SM
Unit Cost	$283.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$26,960.30

Description

A wood finish is applied to interior ceilings.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - C303005

Recommendations

Recommendations #1 - Wood Ceiling	
Type	Life Cycle Replacement
Year	2029
Cost	$26,960.30

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Firehall (Township)
Installation Year	1999
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Year
Renewal Year	2023
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

Description

The plumbing fixtures include floor-mounted vitreous china water closets. The water closets are equipped with manual flush devices.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include stains. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - D201001

Palmer Fire Hall 1 - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2023
Cost	$1,633.13

Element Description	
Name	D201002 - Urinals - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

Description

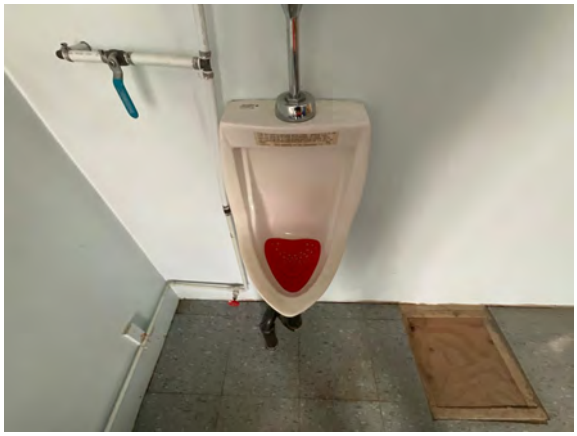
The plumbing fixtures include wall-mounted vitreous china urinals. The urinals are equipped with manual flush devices.

Condition Narrative

No significant deficiencies were observed or reported. The flush valve appears to have been replaced recently. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D201002



Palmer Fire Hall 1 - D201002

Recommendations

Recommendations #1 - Urinals	
Type	Life Cycle Replacement
Year	2034
Cost	$1,633.13

Element Description	
Name	D201004 - Sinks - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$979.88

Description

The plumbing fixtures include single bowl plastic utility sinks equipped with manual tap-sets and located in the laundry room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D201016

Recommendations

Recommendations #1 - Sinks	
Type	Life Cycle Replacement
Year	2034
Cost	$979.88

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	15 Years
Renewal Year	2039
Quantity / Unit of Measure	204 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$16,657.95

Description

The building domestic water distribution, where visible, consists of cold and hot water copper pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D202001

Palmer Fire Hall 1 - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2039
Cost	$16,657.95

Element Description	
Name	D202037 - Domestic Water Heaters - Instantaneous - Firehall (Township)
Installation Year	2014
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$5,030.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,845.55

Description

The domestic water distribution includes a residential-grade natural gas-fired domestic hot water heater. The water heater has an input heating rating of 175 MBH. The unit is manufactured by Quietside and is located in the laundry room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D202034

Recommendations

Recommendations #1 - Domestic Water Heaters - Instantaneous	
Type	Life Cycle Replacement
Year	2029
Cost	$6,845.55

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	204 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$16,657.95

Description

The building sanitary waste drainage, where visible, consists of rigid plastic pipe drain lines and risers. The drainage includes pipe vents, traps, and floor drains. The sanitary waste drainage connects to the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D203001

Palmer Fire Hall 1 - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2049
Cost	$16,657.95

Element Description	
Name	D209006 - Air Compressors and Air Dryers - Firehall (Township)
Installation Year	2016
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	7 Years
Renewal Year	2031
Quantity / Unit of Measure	1 / Each
Unit Cost	$8,800.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,976.31

Description

The compressed air distribution includes an air compressor system. The system is manufactured by Jordair and is located in the mechanical room. The system includes copper piping, fittings, a compressor, a dryer, an oxygen concentrator, a manifold, and outlets.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D209006

Palmer Fire Hall 1 - D209006

Palmer Fire Hall 1 - D209006

Palmer Fire Hall 1 - D209006

Palmer Fire Hall 1 - D209006

Palmer Fire Hall 1 - D209006

Recommendations

Recommendations #1 - Air Compressors and Air Dryers	
Type	Life Cycle Replacement
Year	2031
Cost	$11,976.31

D30 HVAC

Element Description	
Name	D301012 - Fuel Supply Storage Tanks (Interior) - Firehall (Township)
Installation Year	2012
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	28 Years
Renewal Year	2052
Quantity / Unit of Measure	910 / L
Unit Cost	$46.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,090.73

Description

The diesel /fuel oil supply includes a horizontal. The tank manufacturing company is unknown and has a storage capacity of 910 L. The unit is located in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D301012

Palmer Fire Hall 1 - D301012

Recommendations

Recommendations #1 - Fuel Supply Storage Tanks (Interior)	
Type	Life Cycle Replacement
Year	2052
Cost	$17,090.73

Element Description	
Name	D304001 - Air Distribution Systems - Firehall (Township)
Installation Year	2000
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	26 Years
Renewal Year	2050
Quantity / Unit of Measure	204 / SM Building
Unit Cost	$178.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$49,418.60

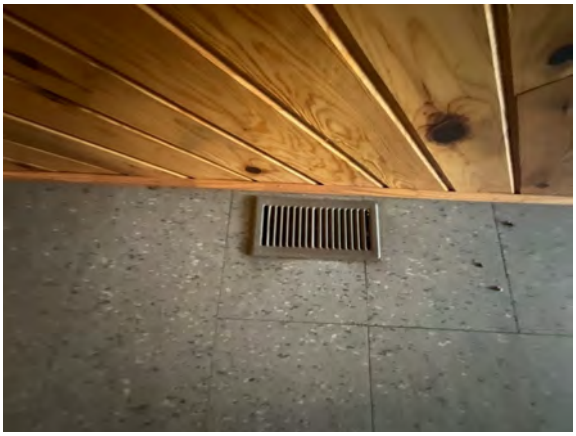
Description

The air distribution in the vehicle bay, where visible, consists of a network of galvanized sheet metal supply, return, and exhaust air ductwork. The distribution includes dampers and diffusers.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Fire Hall 1 - D304001

Palmer Fire Hall 1 - D304001

Palmer Fire Hall 1 - D304001

Palmer Fire Hall 1 - D304001

Recommendations

Recommendations #1 - Air Distribution Systems	
Type	Life Cycle Replacement
Year	2050
Cost	$49,418.60

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Firehall (Township)
Installation Year	2017
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$702.25

Description

ABC Type Fire Extinguishers are located in the common area space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D403002

Palmer Fire Hall 1 - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$702.25

D50 Electrical

Element Description	
Name	D501024 - Main Service Panels - Firehall (Township)
Installation Year	2014
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	30 Years
Renewal Year	2054
Quantity / Unit of Measure	1 / Each
Unit Cost	$16,330.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,224.22

Description

The electrical service includes a main service panel. The panelboard is rated 225 A at 120/240V and is located in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D501003

Palmer Fire Hall 1 - D501003

Element Description	
Name	D502002 - Interior Lighting - Firehall (Township)
Installation Year	1999
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	68 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,364.95

Description

The building interior lighting consists of linear light fixtures in the first-floor hall. Linear fixtures appear to be T12.

Condition Narrative

No significant deficiencies were observed or reported. However the lighting is energy inefficient. Replacement with upgrade to LED is recommended.

Photos

Palmer Fire Hall 1 - D502002

Palmer Fire Hall 1 - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2026
Cost	$10,364.95

Element Description	
Name	D502011 - Branch Wiring and Devices - Residential - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	204 / SM
Unit Cost	$64.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,768.48

Description

The building branch wiring consists of non-metallic sheathed copper wire. The wiring includes junction boxes, devices, switches and receptacles.

Condition Narrative

No significant deficiencies were observed or reported. some of the wiring appears to have been updated over time. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D502001

Palmer Fire Hall 1 - D502001

Palmer Fire Hall 1 - D502001

Palmer Fire Hall 1 - D502001

Recommendations

Recommendations #1 - Branch Wiring and Devices - Residential	
Type	Life Cycle Replacement
Year	2049
Cost	$17,768.48

Element Description	
Name	D502021 - Interior Lighting Residential - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	204 / SM
Unit Cost	$35.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,717.14

Description

The building interior lighting consists of linear light fixtures and Incandescent light bulbs in the main hall. Linear fixtures appear to be T8.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. Upgrade to LED should be considered.

Photos

Palmer Fire Hall 1 - D502002

Palmer Fire Hall 1 - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2034
Cost	$9,717.14

Element Description	
Name	D502041 - Exterior Lighting - Firehall (Township)
Installation Year	2022
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	2 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,562.36

Description

The building exterior lighting consists of wall-pack mounted fixtures along the perimeter of the building and canopy pot light fixtures at entrances. The wall fixtures are LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - D502041

Palmer Fire Hall 1 - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2042
Cost	$1,562.36

Element Description	
Name	D502051 - Exit Lighting - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	204 / SM Building
Unit Cost	$4.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,110.53

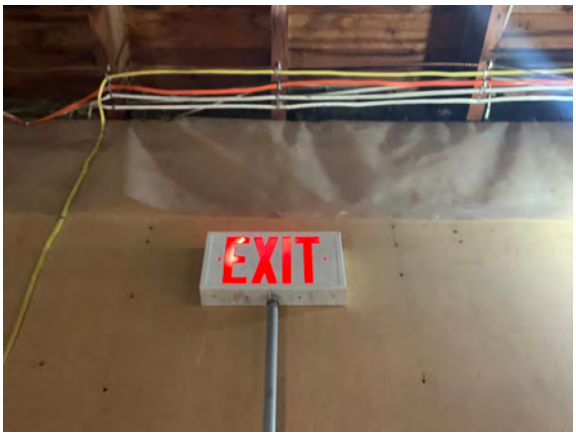
Description

The building exit lighting consists of illuminated single-sided exit signs along at exits.

Condition Narrative

No significant deficiencies were observed or reported. Upgrade to pictogram exit signs should be considered.

Photos



Palmer Fire Hall 1 - D502051

Recommendations

Recommendations #1 - Exit Lighting	
Type	Life Cycle Replacement
Year	2034
Cost	$1,110.53

Element Description	
Name	D503015 - Independent CO and Smoke Alarms - Firehall (Township)
Installation Year	2014
Condition	4 - Poor
Expected Useful Life	10 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$230.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$313.02

Description

The fire alarm system includes an independent smoke alarm located on the first floor.

Condition Narrative

No significant deficiencies were observed or reported. However, the system is approaching or is past the manufacturer's expiry date with reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Palmer Fire Hall 1 - D503015

Recommendations

Recommendations #1 - Independent CO and Smoke Alarms	
Type	Life Cycle Replacement
Year	2024
Cost	$313.02

Element Description	
Name	D509021 - Emergency Lighting - Battery Pack Units (EBUs) - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$688.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$936.33

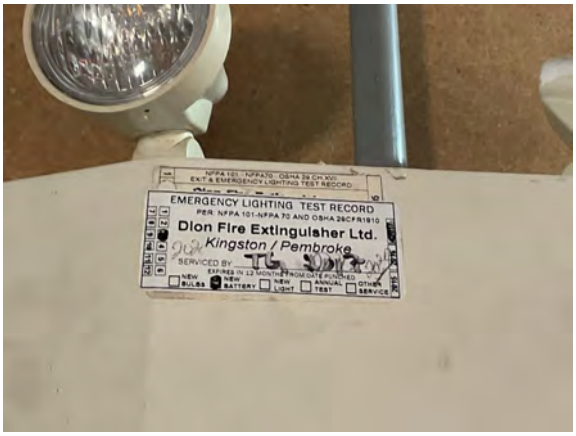
Description

The emergency lighting includes wall-mounted emergency battery pack units with quartz light heads.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred. Upgrade to LED should be considered.

Photos



Palmer Fire Hall 1 - D509021

Palmer Fire Hall 1 - D509021

Recommendations

Recommendations #1 - Emergency Lighting - Battery Pack Units (EBUs)	
Type	Life Cycle Replacement
Year	2029
Cost	$936.33

G Building Sitework
G30 Site Mechanical Utilities

Element Description	
Name	G301021 - Water Supply Service - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	50 / LM
Unit Cost	$218.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$14,834.29

Description

The underground water supply service is assumed to be equivalent to 40mm PVC piping in a 1 M. trench from the municipality Township Office domestic water well via the Palmer Rec Center to the building service room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.
Note: No photo available.

Recommendations

Recommendations #1 - Water Supply Service	
Type	Life Cycle Replacement
Year	2049
Cost	$14,834.29

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Firehall (Township)
Installation Year	1999
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,198.71

Description

The building site includes a septic system comprising an underground concrete septic tank presumably connected to a drain field.

Condition Narrative

No significant deficiencies were observed or reported. The septic tank is concealed below ground and cannot be fully assessed via visual means. Replacement is not anticipated in the short term.

Recommendations

Recommendations #1 - Septic Tank - 4000 Gallons	
Type	Life Cycle Replacement
Year	2049
Cost	$51,198.71

G40 Site Electrical Utilities

Element Description	
Name	G401010 - Electrical Service Single Phase - Firehall (Township)
Installation Year	2014
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	40 Years
Renewal Year	2064
Quantity / Unit of Measure	30 / LM
Unit Cost	$297.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$12,126.01

Description

The overhead electrical service is assumed to be equivalent to 200A 3 wire single phase from the utility to the building electrical service equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Fire Hall 1 - G401010

12 PALMER PUBLIC WORKS GARAGE

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Palmer Public Works Garage

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Palmer Public Works Garage, located at 42 Burnt Bridge Rd, Palmer Rapids, ON, was reportedly constructed in 1974. The original building is a single-storey building and has a reported gross floor area of approximately 240 SM (2580 SF). The building is used as a fire truck garage. The site visit was done on May 16, 2023.

Facility No	PPWG
Name	Palmer Public Works Garage
Address	42 Burnt Bridge Rd - Palmer Rapids - ON - Canada
Area	2580 SM
Floors	1
Year Constructed	1974
Condition Assessment Date	April 05, 2023
Replacement value	$1,407,183.47
3 Year FCI	6.6%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Palmer Public Works Garage, located at 42 Burnt Bridge Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on April 05, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A101001 - Standard Foundations - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	64 / LM Footprint
Unit Cost	$1,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$127,166.61

Description
Based on the information gathered during the assessment, the foundations are standard shallow foundations bearing on good native soil. Due to the hidden nature of the building foundations, a visual site confirmation of the foundation type was not possible.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Recommendations

Recommendations #1 - Standard Foundations	
Type	Life Cycle Replacement
Year	2049
Cost	$127,166.61

Element Description	
Name	A103001 - Slab on Grade - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	240 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$34,622.42

Description

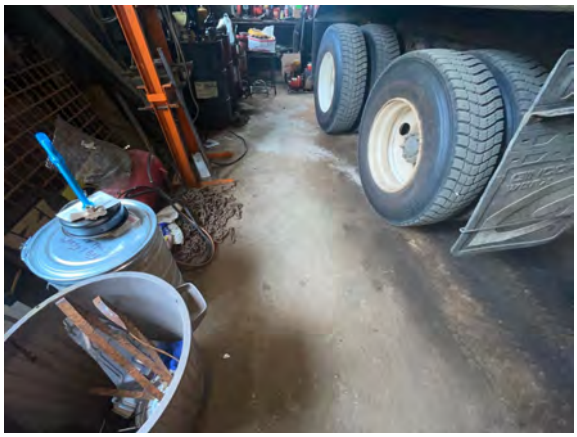
Based on the information gathered during the assessment, the floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible.

Condition Narrative

Some minor isolated cracking was observed, but no significant elevation difference to suggest differential settlement of the concrete slab-on-grade was noted.

Photos

Palmer Public Works Garage - A103001



Palmer Public Works Garage - A103001

Palmer Public Works Garage - A103001

Recommendations

Recommendations #1 - Slab on Grade	
Type	Life Cycle Replacement
Year	2049
Cost	$34,622.42

B Shell
B10 Superstructure

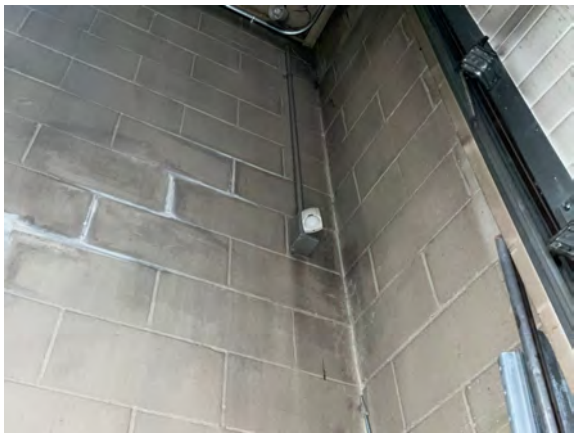
Element Description	
Name	B103001 - Structure - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	240 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$129,997.37

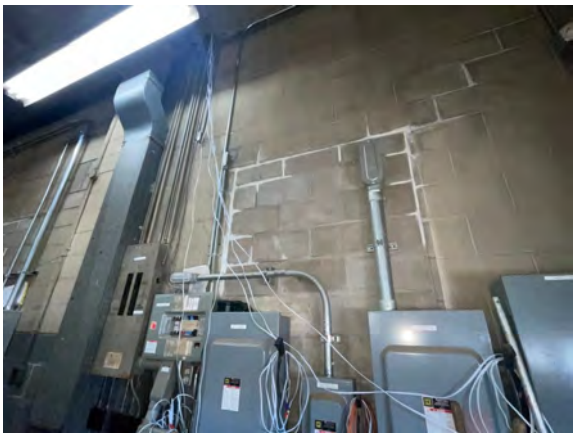
Description
Based on the information gathered during the assessment, the building overall structure likely consists of concrete masonry unit (CMU) walls and metal beams supporting a suspended wood joist floor and wood truss roof with roof sheathing.

Condition Narrative
No significant deficiencies were observed or reported. Isolated mortar repair appears to have been completed recently. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - B103001


Palmer Public Works Garage - B103001



Palmer Public Works Garage - B103001

Recommendations

Recommendations #1 - Structure	
Type	Life Cycle Replacement
Year	2045
Cost	$129,997.37

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	64 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$12,106.96

Description
Exterior soffits are covered with perforated, vinyl panels.

Condition Narrative
No significant deficiencies were observed or reported. Stains and fading were observed in isolated areas. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - B201008


Palmer Public Works Garage - B201008

Recommendations

Recommendations #1 - Exterior Soffits	
Type	Life Cycle Replacement
Year	2029
Cost	$12,106.96

Element Description	
Name	B201010 - Exterior Coatings/Paint - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	10 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	320 / SM
Unit Cost	$46.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$20,033.10

Description

A paint finish is applied to exterior wall surfaces.

Condition Narrative

Deficiencies observed or reported during the assessment include fading and patching. The deterioration is anticipated to progress due to age and exposure to the elements and may lead to deterioration of underlying surfaces. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - B201010

Palmer Public Works Garage - B201010

Recommendations

Recommendations #1 - Exterior Coatings/Paint	
Type	Life Cycle Replacement
Year	2024
Cost	$20,033.10

Element Description	
Name	B201021 - Masonry - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	320 / SM
Unit Cost	$754.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$328,368.57

Description

Exterior wall surfaces include mortar-set brick masonry.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. However, minor spalling was noted which should be repaired as a part of ongoing maintenance.

Photos

Palmer Public Works Garage - B201021

Palmer Public Works Garage - B201021

Recommendations

Recommendations #1 - Masonry	
Type	Life Cycle Replacement
Year	2049
Cost	$328,368.57

Element Description	
Name	B201026 - Wood Siding - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	6 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,057.75

Description

Exterior wall surfaces are clad with wood siding.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged surfaces, delamination, deformation, loose connections, loose components, staining, fading, and gaps in material coverage. The deterioration is anticipated to progress due to age and exposure to the elements and may lead to moisture infiltration, and a weakening of integrity. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - B201026

Recommendations

Recommendations #1 - Wood Siding	
Type	Life Cycle Replacement
Year	2026
Cost	$2,057.75

Element Description	
Name	B202001 - Windows - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	18 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$29,396.39

Description

Exterior windows are insulated glazing units set in operable frames.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, has surpassed its expected useful life and may experience sealant failure over time, resulting in potential leakage, condensation, energy loss, and discomfort for building occupants. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - B202001

Palmer Public Works Garage - B202001

Palmer Public Works Garage - B202001

Palmer Public Works Garage - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2026
Cost	$29,396.39

Element Description	
Name	B203022 - Overhead Doors - Industrial - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	3 / Each
Unit Cost	$15,070.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$61,528.28

Description

Sectional panel overhead doors are provided on the building exterior.

Condition Narrative

No significant deficiencies were observed or reported. The doors appear to have been updated with newer weatherstripping and lower panels. Some wear on the hardware was observed. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - B203022

Palmer Public Works Garage - B203022

Palmer Public Works Garage - B203022

Recommendations

Recommendations #1 - Overhead Doors - Industrial	
Type	Life Cycle Replacement
Year	2029
Cost	$61,528.28

Element Description	
Name	B203023 - Single Door - Hollow Metal - Workshop
Installation Year	2014
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	20 Years
Renewal Year	2044
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,470.99

Description

Exterior single-door assemblies include painted steel panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - B203023

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2044
Cost	$5,470.99

B30 Roofing

Element Description	
Name	B301005 - Gutters and Downspouts - Workshop
Installation Year	2013
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	24 / LM
Unit Cost	$57.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,861.77

Description

Gutters and downspouts are installed for the collection of stormwater runoff. The downspouts discharge onto paved or landscaped surfaces at ground level.

Condition Narrative

No significant deficiencies were observed or reported. Some fasteners appear to be corroded and causing staining on the fascia and soffit. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - B301005

Palmer Public Works Garage - B301005

Recommendations

Recommendations #1 - Gutters and Downspouts	
Type	Life Cycle Replacement
Year	2043
Cost	$1,861.77

Element Description	
Name	B301028 - Metal Roofing - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	40 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	288 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$155,996.85

Description

Exterior wall surfaces include metal siding panels.

Condition Narrative

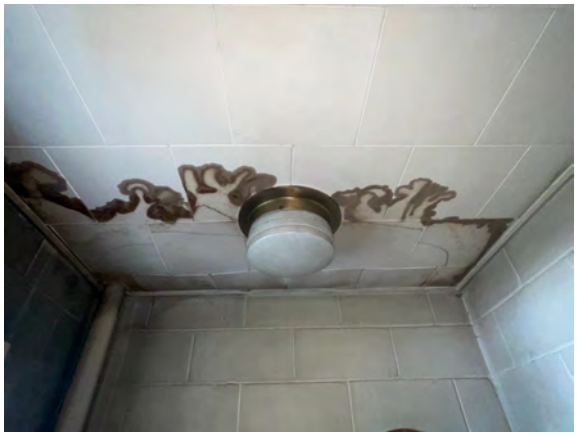
No significant deficiencies were observed or reported. However isolated areas of ceiling water stains suggest past roof leaks. The system, based on age may experience weakening of integrity over time, resulting in further moisture infiltration, damage to internal elements, and disruption to building operations. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - B301028

Palmer Public Works Garage - B301028

Palmer Public Works Garage - B301028



Palmer Public Works Garage - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2026
Cost	$155,996.85

C Interiors
C10 Interior Construction

Element Description	
Name	C101001 - Fixed Partitions - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	80 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$15,351.45

Description

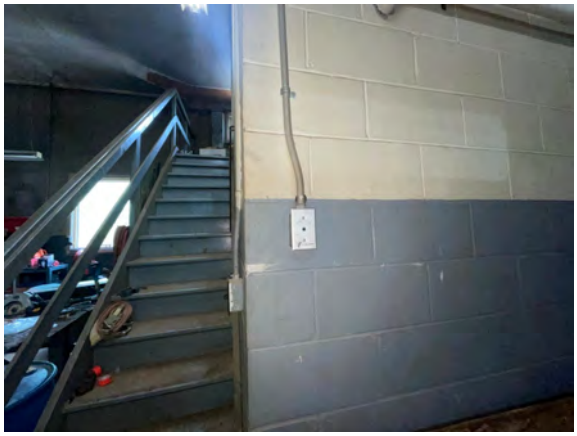
Interior fixed partitions include concrete masonry unit (CMU) walls. The partition walls also support a wood framed mezzanine floor.

Condition Narrative

No significant deficiencies were observed or reported. Isolated mortar repair appears to have been completed recently. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - C101001



Palmer Public Works Garage - C101001

Recommendations

Recommendations #1 - Fixed Partitions	
Type	Life Cycle Replacement
Year	2045
Cost	$15,351.45

Element Description	
Name	C102021 - Single Door - Hollow Metal - Workshop
Installation Year	2013
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,140.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,273.36

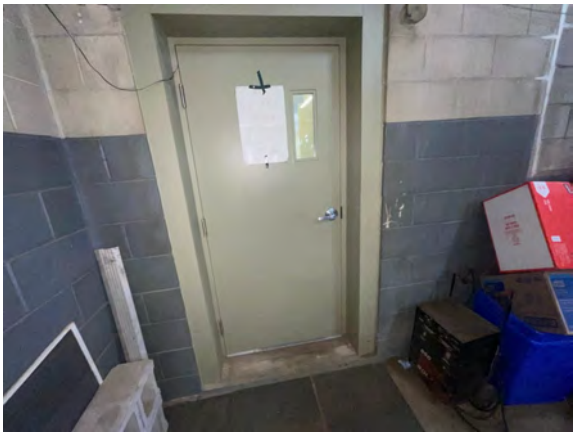
Description

Exterior swing-type single-door assemblies include painted and insulated steel panels that are hinge-mounted within painted steel frames. Select door panels include vision tile composed of an insulated single-paned glazing unit.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Public Works Garage - C102021

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2053
Cost	$4,273.36

Element Description	
Name	C102022 - Single Door - Wood - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	2 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,859.16

Description

Interior single-door assemblies include wood panels that are set within steel frames.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - C102022

Palmer Public Works Garage - C102022

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2026
Cost	$6,859.16

C20 Stairs

Element Description	
Name	C201001 - Interior Stair Construction - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	14 / Per Riser
Unit Cost	$1,140.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$21,720.67

Description
Interior wood stairs provide access between floor levels.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Palmer Public Works Garage - C201001

Recommendations

Recommendations #1 - Interior Stair Construction	
Type	Life Cycle Replacement
Year	2049
Cost	$21,720.67

C30 Interior Finishes

Element Description	
Name	C301005 - Paint Wall Covering - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	10 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	192 / SM Building
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$13,848.97

Description

A paint finish is applied to most wall surfaces in the building.

Condition Narrative

Deficiencies observed or reported during the assessment include staining, discoloration and fading. The deterioration is anticipated to progress due to age. Replacement is recommended in the short term.

Recommendations

Recommendations #1 - Paint Wall Covering	
Type	Life Cycle Replacement
Year	2025
Cost	$13,848.97

Element Description	
Name	C301022 - Wood Wall Finish - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	25 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	30 / SM
Unit Cost	$340.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,164.49

Description

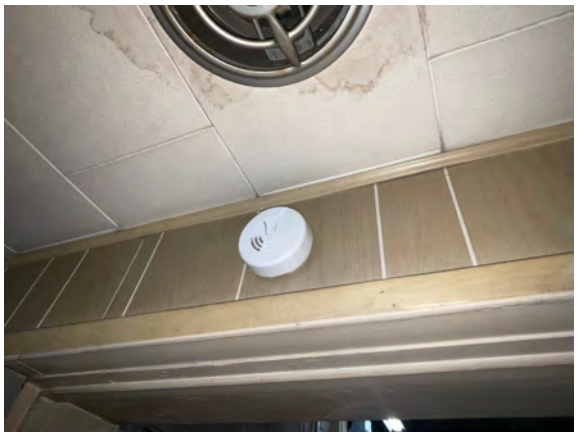
A wood facade finish is applied to some walls in the office area.

Condition Narrative

Deficiencies observed or reported during the assessment include staining, discoloration and fading. The deterioration is anticipated to progress due to age. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - C301022



Palmer Public Works Garage - C301022

Palmer Public Works Garage - C301022

Recommendations

Recommendations #1 - Wood Wall Finish	
Type	Life Cycle Replacement
Year	2024
Cost	$4,164.49

Element Description	
Name	C302007 - Painted / Sealed Floor - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	15 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	240 / SM
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,311.21

Description

A painted/sealed floor is applied in the garage area.

Condition Narrative

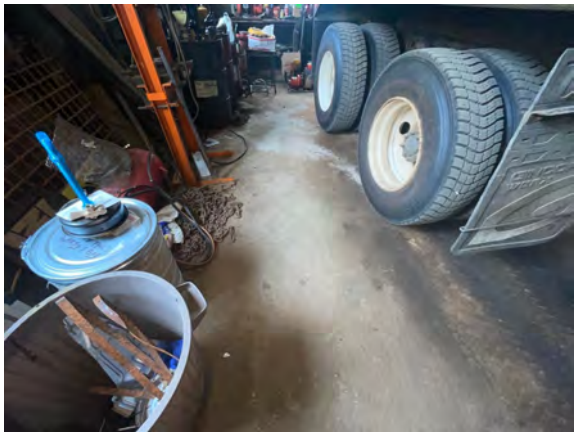
Deficiencies observed or reported during the assessment include stained, worn and peeling paint. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - C302007

Palmer Public Works Garage - C302007

Palmer Public Works Garage - C302007



Palmer Public Works Garage - C302007

Recommendations

Recommendations #1 - Painted / Sealed Floor	
Type	Life Cycle Replacement
Year	2024
Cost	$17,311.21

Element Description	
Name	C303004 - Acoustic Tile Ceiling - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	30 / SM
Unit Cost	$88.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,592.89

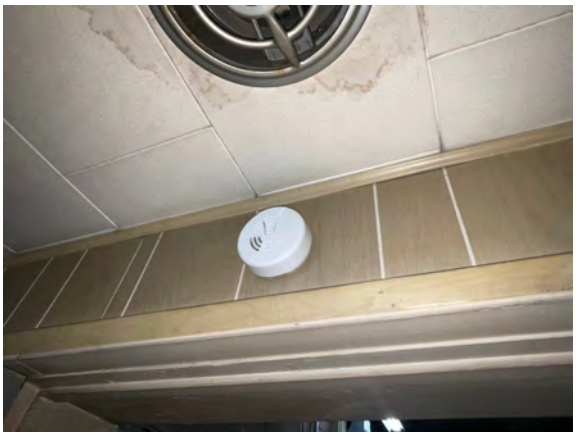
Description

A fibreboard ceiling tile finish is applied in the office area.

Condition Narrative

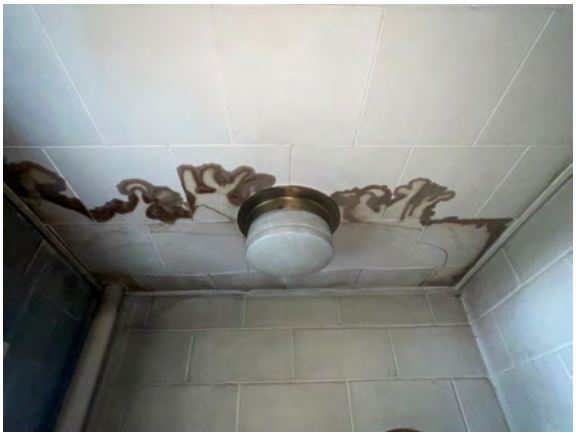
Deficiencies observed or reported during the assessment include staining, discoloration and fading. The deterioration is anticipated to progress due to age. Replacement is recommended in the short term.

Photos



Palmer Public Works Garage - C303004

Palmer Public Works Garage - C303004



Palmer Public Works Garage - C303004

Recommendations

Recommendations #1 - Acoustic Tile Ceiling	
Type	Life Cycle Replacement
Year	2024
Cost	$3,592.89

Element Description	
Name	C303005 - Wood Ceiling - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	240 / SM
Unit Cost	$283.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$92,435.32

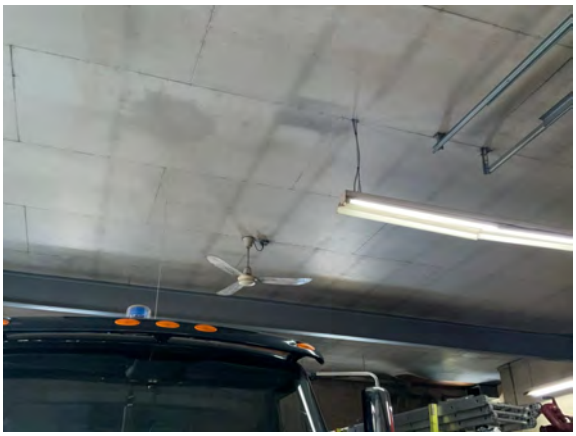
Description

A wood finish is applied to garage interior ceilings.

Condition Narrative

No significant deficiencies were observed or reported. However, dirt and particulate have accumulated on the wood panels. Repainting is recommended. Replacement is not anticipated in the short term.

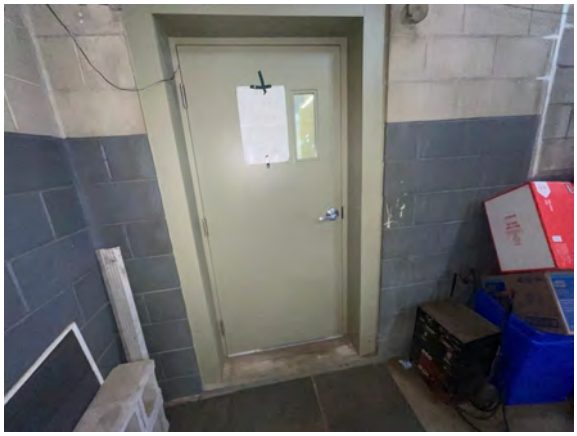
Photos



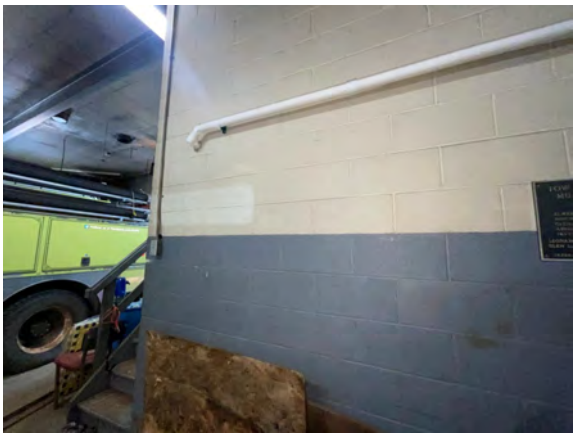
Palmer Public Works Garage - C303005

Palmer Public Works Garage - C303005

Palmer Public Works Garage - C303005



Palmer Public Works Garage - C303005



Palmer Public Works Garage - C303005

Recommendations

Recommendations #1 - Wood Ceiling	
Type	Major Repair
Year	2023
Cost	$11,900.00

Recommendations #2 - Wood Ceiling	
Type	Life Cycle Replacement
Year	2029
Cost	$92,435.32

D Services
D10 Conveying

Element Description	
Name	D109007 - Overhead Cranes - Fixed - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$9,850.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$13,405.30

Description
Conveying of equipment is provided by a single-beam overhead crane system.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Palmer Public Works Garage - E103006

Recommendations

Recommendations #1 - Overhead Cranes - Fixed	
Type	Life Cycle Replacement
Year	2029
Cost	$13,405.30

D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Workshop
Installation Year	2013
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

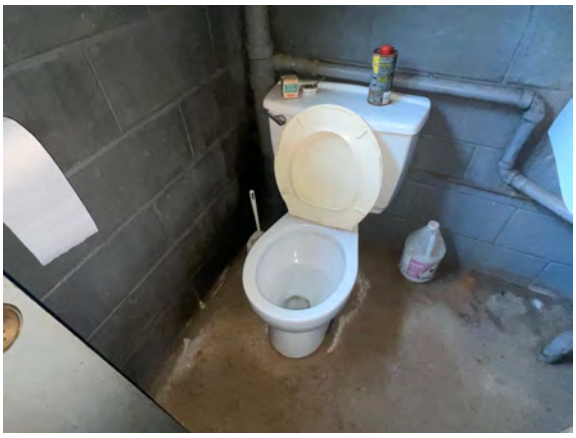
Description

The plumbing fixtures include floor-mounted vitreous china water closets. The water closets are equipped with manual flush devices.

Condition Narrative

No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Public Works Garage - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2048
Cost	$1,633.13

Element Description	
Name	D201003 - Lavatories - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

Description

The plumbing fixtures include vitreous china lavatories. The lavatories are equipped with manual tap sets.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - D201003

Recommendations

Recommendations #1 - Lavatories	
Type	Life Cycle Replacement
Year	2026
Cost	$1,633.13

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	40 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	240 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$19,597.59

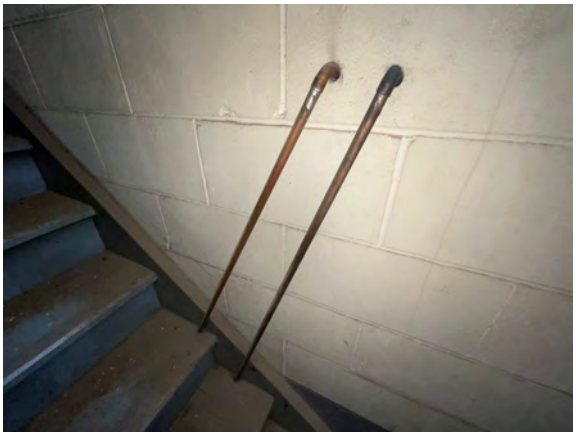
Description

The building domestic water distribution, where visible, consists of cold and hot water copper pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

No significant deficiencies were observed or reported. Some sections of piping appear to have been updated. However, the majority of the system appears to be original to building construction and due to age can experience piping fatigue over time which can result in failure. Replacement is recommended in the short term.

Photos



Palmer Public Works Garage - D202001

Palmer Public Works Garage - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2026
Cost	$19,597.59

Element Description	
Name	D202008 - Domestic Water Expansion Tanks/Pressure Tanks - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	30 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,590.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,123.37

Description

The domestic water distribution includes a pressure tank with a regulator. The tank is manufactured by Well-X and is located in the main hall attic.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - D202021

Recommendations

Recommendations #1 - Domestic Water Expansion Tanks/Pressure Tanks	
Type	Life Cycle Replacement
Year	2026
Cost	$3,123.37

Element Description	
Name	D202033 - Domestic Water Heaters - Commercial Electric - Workshop
Installation Year	1995
Condition	4 - Poor
Expected Useful Life	15 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	175 / Liter
Unit Cost	$57.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$13,575.42

Description

The domestic water distribution includes an electric domestic hot water heater. The water heater has a storage capacity of 175 L. The unit is manufactured by John Wood, model JW525ESC, serial number 95034478998, and is located under the stairs.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - D202034

Palmer Public Works Garage - D202034

Recommendations

Recommendations #1 - Domestic Water Heaters - Residential Gas-Fired	
Type	Life Cycle Replacement
Year	2024
Cost	$13,575.42

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Workshop
Installation Year	1974
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	240 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$19,597.59

Description

The building sanitary waste drainage, where visible, consists of rigid plastic pipe drain lines and risers. The drainage includes steel pipe vents, traps and floor drains. The sanitary waste drainage connects to the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. The system appears to have been updated. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2026
Cost	$19,597.59

Element Description	
Name	D209005 - Compressed Air Piping and Fittings - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	240 / SM
Unit Cost	$27.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,818.92

Description

The compressed air distribution consists of steel piping, fittings, and outlets for the garage trucks.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life and can experience electrical or thermal breakdown over time which can eventually result in failure. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - D209005

Recommendations

Recommendations #1 - Compressed Air Piping and Fittings	
Type	Life Cycle Replacement
Year	2024
Cost	$8,818.92

Element Description	
Name	D209006 - Air Compressors and Air Dryers - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	15 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$8,800.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,976.31

Description

The compressed air distribution includes an air compressor and dryer system.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - D209006

Palmer Public Works Garage - D209006

Recommendations

Recommendations #1 - Air Compressors and Air Dryers	
Type	Life Cycle Replacement
Year	2024
Cost	$11,976.31

D30 HVAC

Element Description	
Name	D301002 - Natural Gas Supply Piping and Fittings - Workshop
Installation Year	2022
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	240 / SM
Unit Cost	$30.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,798.80

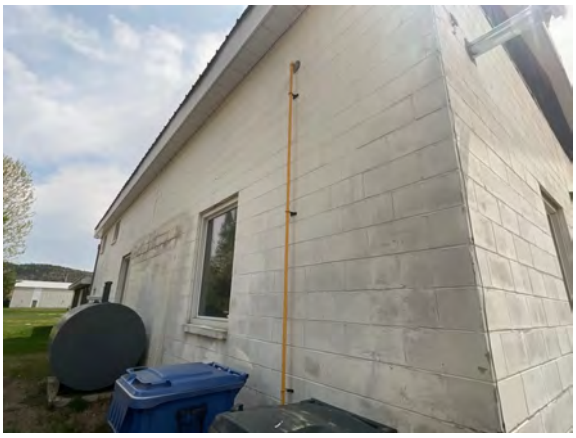
Description

The building propane supply consists of steel piping and fittings from the storage tank to the fuel-fired equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Public Works Garage - D301001

Recommendations

Recommendations #1 - Gas Distribution (Natural or Propane)	
Type	Life Cycle Replacement
Year	2072
Cost	$9,798.80

Element Description	
Name	D302004 - Fuel-Fired Unit Heaters - Workshop
Installation Year	2022
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,940.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,362.12

Description

Building heating includes propane-fired unit heaters. The units are located in the workshop area.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - D302004

Palmer Public Works Garage - D302004

Recommendations

Recommendations #1 - Fuel-Fired Unit Heaters	
Type	Life Cycle Replacement
Year	2040
Cost	$5,362.12

Element Description	
Name	D304033 - Exhaust Fans - Residential - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	25 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,150.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,565.09

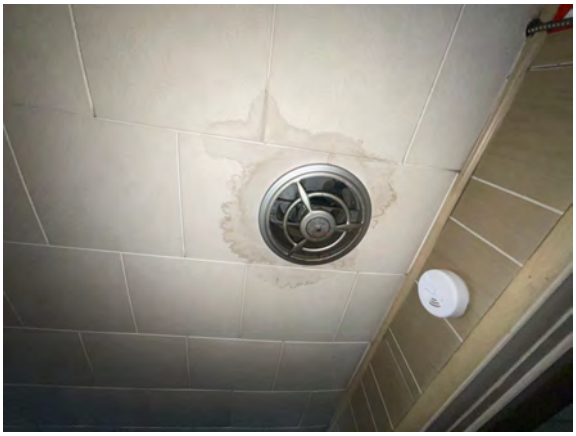
Description

Building ventilation includes axial fans for ventilation in washrooms.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos



Palmer Public Works Garage - D304033

Recommendations

Recommendations #1 - Exhaust Fans - Residential	
Type	Life Cycle Replacement
Year	2026
Cost	$1,565.09

Element Description	
Name	D305010 - Electric Baseboard Heaters - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	18 Years
Remaining Useful Life	1 Year
Renewal Year	2025
Quantity / Unit of Measure	1 / Each
Unit Cost	$360.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$489.94

Description

The building HVAC includes a perimeter electric baseboard heater. The unit is located in the mezzanine.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - D305010

Recommendations

Recommendations #1 - Electric Baseboard Heaters	
Type	Life Cycle Replacement
Year	2026
Cost	$489.94

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Workshop
Installation Year	2017
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	4 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,404.49

Description

ABC Type Fire Extinguishers are located in the corridors and common area space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$1,404.49

D50 Electrical

Element Description	
Name	D501025 - Main Service Disconnects - Workshop
Installation Year	2013
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	1 / Each
Unit Cost	$12,560.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,093.46

Description

Electrical service to the building is directed to a main disconnect with metering for each unit located in the main electrical room of the building. The main disconnect has a rating of 400A at 120/240V.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - D501025

Recommendations

Recommendations #1 - Main Service Disconnects	
Type	Life Cycle Replacement
Year	2053
Cost	$17,093.46

Element Description	
Name	D501031 - Electrical Distribution - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	40 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	120 / SM Building
Unit Cost	$79.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$12,901.75

Description

The electrical distribution consists of switchboards, panelboards, disconnects, feeders and associated equipment. The feeders are insulated copper wire in rigid metal conduit. The distribution is fed by the main service disconnect.

Condition Narrative

No significant deficiencies were observed or reported. However, the system based on age, is approaching or is past its expected useful life and can experience electrical or thermal breakdown over time. Replacement is recommended in the short term.

Photos

Palmer Public Works Garage - D501031

Palmer Public Works Garage - D501031

Palmer Public Works Garage - D501031

Recommendations

Recommendations #1 - Electrical Distribution	
Type	Life Cycle Replacement
Year	2026
Cost	$12,901.75

Element Description	
Name	D501031 - Electrical Distribution - Workshop
Installation Year	2013
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	120 / SM Building
Unit Cost	$79.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$12,901.75

Description

The electrical distribution consists of switchboards, panelboards, disconnects, feeders and associated equipment. The feeders are insulated copper wire in rigid metal conduit. The distribution is fed by the main service disconnect.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - D501031

Palmer Public Works Garage - D501031

Recommendations

Recommendations #1 - Electrical Distribution	
Type	Life Cycle Replacement
Year	2053
Cost	$12,901.75

Element Description	
Name	D502001 - Branch Wiring and Devices - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	50 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	240 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$46,054.34

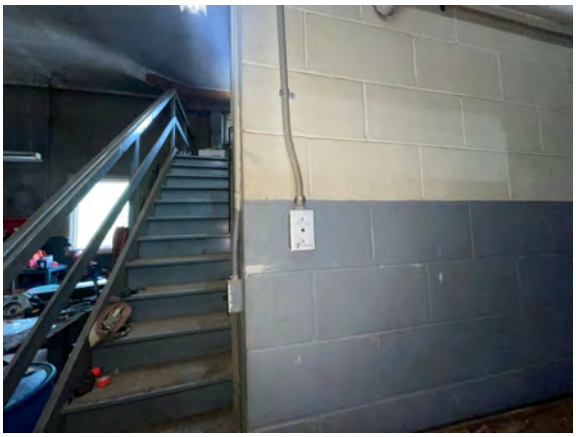
Description

The building branch wiring consists of insulated copper wire in rigid metal conduit and flexible armored cable. The wiring includes junction boxes, devices, switches and receptacles.

Condition Narrative

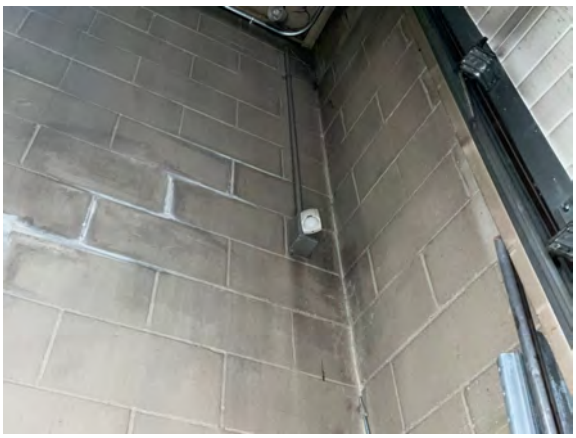
No significant deficiencies were observed or reported. Some wiring was added over time. However the system, based on age, is approaching or is past its expected useful life and can experience insulation breakdown over time. Replacement is recommended in the short term.

Photos



Palmer Public Works Garage - D502001

Palmer Public Works Garage - D502001



Palmer Public Works Garage - D502001

Palmer Public Works Garage - D502001

Recommendations

Recommendations #1 - Branch Wiring and Devices	
Type	Life Cycle Replacement
Year	2026
Cost	$46,054.34

Element Description	
Name	D502002 - Interior Lighting - Workshop
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	240 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$36,582.17

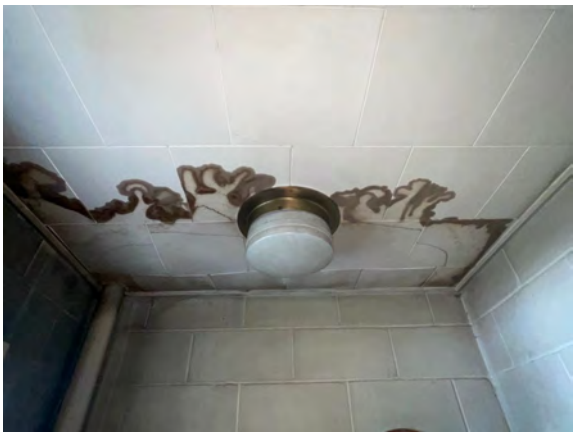
Description

The building interior lighting consists of linear fixtures. The fixtures appear to be T8.

Condition Narrative

No significant deficiencies were observed or reported. However the lighting is energy inefficient. Replacement with upgrade to LED is recommended.

Photos



Palmer Public Works Garage - D502002

Palmer Public Works Garage - D502002

Palmer Public Works Garage - D502002

Palmer Public Works Garage - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2026
Cost	$36,582.17

Element Description	
Name	D502041 - Exterior Lighting - Workshop
Installation Year	2022
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	2 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,562.36

Description

The building exterior lighting consists of surface-mounted fixtures along the perimeter of the building. The wall fixtures are LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Public Works Garage - D502041

Palmer Public Works Garage - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2042
Cost	$1,562.36

Element Description	
Name	D502051 - Exit Lighting - Workshop
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Year
Renewal Year	2023
Quantity / Unit of Measure	240 / SM Building
Unit Cost	$4.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,306.51

Description

The building exit lighting consists of illuminated single-sided exit signs along egresses and at exits.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include damaged fixtures and poor illumination. Replacement with upgrade to pictogram exit signs is recommended in the short term.

Photos

Palmer Public Works Garage - D502051

Recommendations

Recommendations #1 - Exit Lighting	
Type	Life Cycle Replacement
Year	2023
Cost	$1,306.51

G Building Sitework
G20 Site Improvements

Element Description	
Name	G201025 - Gravel Paved Surface - Roadway - Workshop
Installation Year	1970
Condition	3 - Fair
Expected Useful Life	15 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	45 / SM
Unit Cost	$44.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,694.67

Description
Sand roadway connects the workshop to the road.

Condition Narrative
Deterioration in the form of rutting, and potholes was evident at isolated sections of the gravel paved surface. Repair of the deteriorated sections of the roadway is recommended.

Photos


Palmer Public Works Garage - G201025

Recommendations

Recommendations #1 - Gravel Paved Surface - Roadway	
Type	Life Cycle Replacement
Year	2026
Cost	$2,694.67

G40 Site Electrical Utilities

Element Description	
Name	G401011 - Electrical Service - Workshop
Installation Year	2013
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	39 Years
Renewal Year	2063
Quantity / Unit of Measure	60 / LM
Unit Cost	$930.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$75,940.68

Description

The underground electrical service is assumed to be equivalent to 400A 3 wire single phase from the utility to the building electrical service equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. The service was upgraded in 2013.

Photos

Palmer Public Works Garage - G401011

Palmer Public Works Garage - G401011

13 PALMER REC CENTER

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Palmer Rec Center

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Palmer Rec Center is located at 42 Burnt Bridge Rd, Palmer Rapids, ON. The subject facility consists of a single-storey building, and is used as an Ice Rink Arena and Rec center. The building, which was constructed in 1992 has a reported gross floor area of 2230 SM (24000 SF). The Building Assessment was undertaken on May 15, 2023.

Facility No	PRC
Name	Palmer Rec Center
Address	42 Burnt Bridge Rd - Palmer Rapids - ON - Canada
Area	24000 SM
Floors	1
Year Constructed	1992
Condition Assessment Date	April 04, 2023
Replacement value	$7,716,083.56
3 Year FCI	0.1%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Palmer Rec Center, located at 42 Burnt Bridge Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on April 04, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A102001 - Special Foundations - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	13 / Lump Sum
Unit Cost	$13,000.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$229,999.54

Description
Based on the information gathered during the assessment, the foundations are assumed to be concrete caissons or piers supporting the metal purlin structure. Concrete masonry units (CMUs) appear to be supporting the perimeter CMU walls. Due to the hidden nature of the foundations of the building, a visual site confirmation of the foundation type was not possible.

Condition Narrative
No significant deficiencies were observed or reported on the exposed superstructure or interior finishes to suggest differential settlement or deterioration of the building foundations.

Photos

Palmer Rec Center - A101001


Palmer Rec Center - A101001

Element Description	
Name	A103001 - Slab on Grade - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	630 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$90,883.84

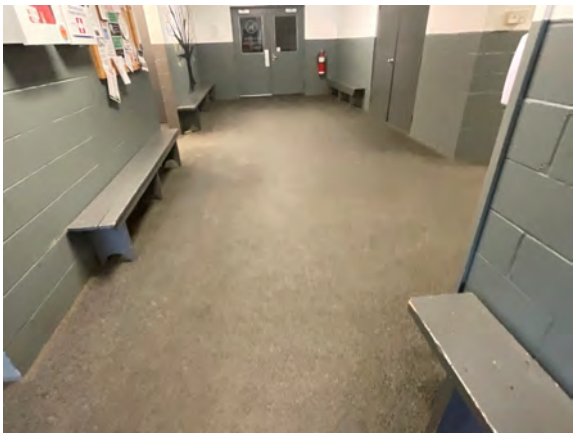
Description

According to the Construction drawings provided, the floor slab appears to be cast in-place reinforced concrete continuously supported by a moisture barrier. The ice rink slab is assessed separately.

Condition Narrative

No major deficiencies were observed or reported. Some minor isolated cracking was observed, no significant elevation difference to suggest differential settlement of the concrete slab-on-grade was noted.

Photos



Palmer Rec Center - A103001

Palmer Rec Center - A103001

Palmer Rec Center - A103001

Palmer Rec Center - A103001

B Shell
B10 Superstructure

Element Description	
Name	B102004 - Canopy - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	36 Years
Renewal Year	2060
Quantity / Unit of Measure	10 / SM
Unit Cost	$43.78
Difficulty / Regional / Soft Cost / Replacement	5.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,979.11

Description
The building exterior includes a canopy structure consisting of a wood-framed canopy with likely a metal roof. The canopy is supported on metal columns on grade.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Palmer Rec Center - B102004

Palmer Rec Center - B102004


Palmer Rec Center - B102004


Palmer Rec Center - B102004

Element Description	
Name	B102004 - Canopy - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	6 / SM
Unit Cost	$43.78
Difficulty / Regional / Soft Cost / Replacement	5.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,787.46

Description

The building exterior includes a canopy structure consisting of a wood-framed canopy with likely a metal roof. The canopy is supported on wood columns on grade.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - B102004

Palmer Rec Center - B102004

Recommendations

Recommendations #1 - Canopy	
Type	Life Cycle Replacement
Year	2042
Cost	$1,787.46

Element Description	
Name	B103001 - Structure - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	61 Years
Renewal Year	2085
Quantity / Unit of Measure	2230 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,207,892.24

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is metal purlins on concrete footings or piers and metal beams and braces supporting a metal roof. The structure also includes perimeter concrete masonry unit (CMU) walls and interior metal columns likely supporting a wood framed sub-roof.

Condition Narrative

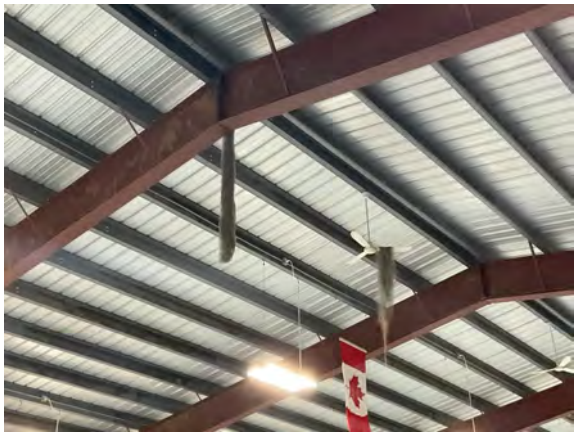
No significant deterioration was noted or signs to suggest the movement of the building structure.

Photos

Palmer Rec Center - B103001

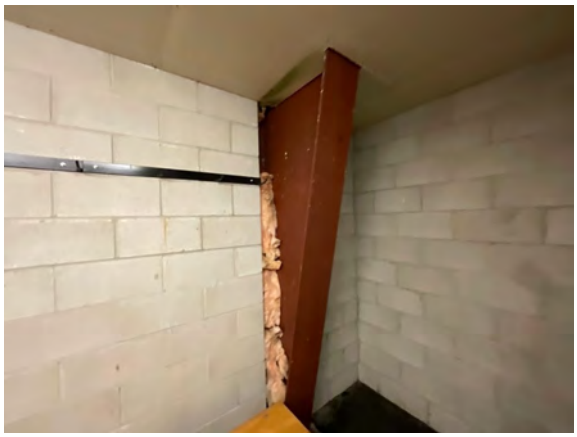
Palmer Rec Center - B103001

Palmer Rec Center - B103001



Palmer Rec Center - B103001

Palmer Rec Center - B103001



Palmer Rec Center - B103001

Palmer Rec Center - B103001

B20 Exterior Enclosure

Element Description	
Name	B201005 - Louvers and Screens - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	36 Years
Renewal Year	2060
Quantity / Unit of Measure	10 / SM
Unit Cost	$880.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,976.31

Description

Fixed metal and wood louvers are provided at exterior wall openings, for ventilation purposes.

Condition Narrative

No significant deficiencies were observed or reported. However, deficiencies observed or reported during the assessment include damaged louvres and improper flashing of the original louvres. The deterioration is anticipated to progress due to age and exposure to the elements. Repair or replacement is recommended.

Photos

Palmer Rec Center - B201005

Palmer Rec Center - B201005

Palmer Rec Center - B201005

Palmer Rec Center - B201005

Palmer Rec Center - B201005

Recommendations

Recommendations #1 - Louvres and Screens	
Type	Major Repair
Year	2023
Cost	$4,000.00

Element Description	
Name	B201008 - Exterior Soffits - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	105 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$19,862.98

Description

Exterior soffits are covered with perforated metal panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - B201008

Palmer Rec Center - B201008

Recommendations

Recommendations #1 - Exterior Soffits	
Type	Life Cycle Replacement
Year	2042
Cost	$19,862.98

Element Description	
Name	B201021 - Masonry - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	23 Years
Renewal Year	2047
Quantity / Unit of Measure	244 / SM
Unit Cost	$754.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$250,381.03

Description

The exterior walls include split face concrete masonry units along the main entrance.

Condition Narrative

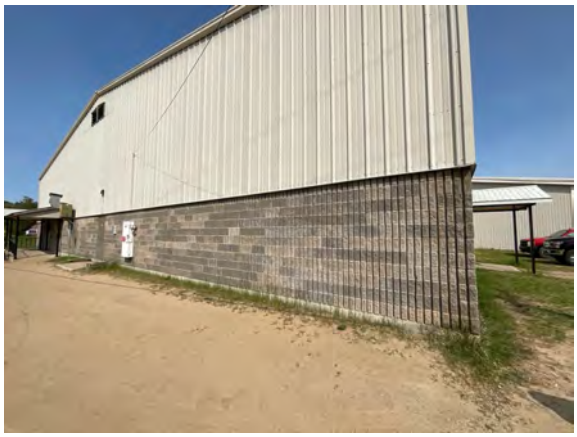
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - B201032

Palmer Rec Center - B201032

Palmer Rec Center - B201032



Palmer Rec Center - B201032

Recommendations

Recommendations #1 - Masonry	
Type	Life Cycle Replacement
Year	2047
Cost	$250,381.03

Element Description	
Name	B201024 - Metal Cladding - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	26 Years
Renewal Year	2050
Quantity / Unit of Measure	1110 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$303,640.22

Description

Exterior wall surfaces include metal siding panels.

Condition Narrative

No significant deficiencies were observed or reported. However, damage due to ice was noted, recommend repair as a part of ongoing maintenance. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - B201024

Palmer Rec Center - B201024

Palmer Rec Center - B201024

Palmer Rec Center - B201024

Recommendations

Recommendations #1 - Metal Cladding	
Type	Life Cycle Replacement
Year	2050
Cost	$303,640.22

Element Description	
Name	B203023 - Single Door - Hollow Metal - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	6 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$32,825.97

Description

Exterior single-door assemblies include painted steel panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - B203023

Palmer Rec Center - B203023

Palmer Rec Center - B203023

Palmer Rec Center - B203023

Palmer Rec Center - B203023

Palmer Rec Center - B203023

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2040
Cost	$32,825.97

Element Description	
Name	B203028 - Double Door - Aluminum and Glass - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	1 / Each
Unit Cost	$11,310.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$15,392.28

Description

Exterior double-door assemblies include aluminum panels with insulated glazing units that are set within matching frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - B203028

Recommendations

Recommendations #1 - Double Door - Aluminum and Glass	
Type	Life Cycle Replacement
Year	2045
Cost	$15,392.28

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	2676 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,449,470.69

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - B301028

Palmer Rec Center - B301028

Recommendations

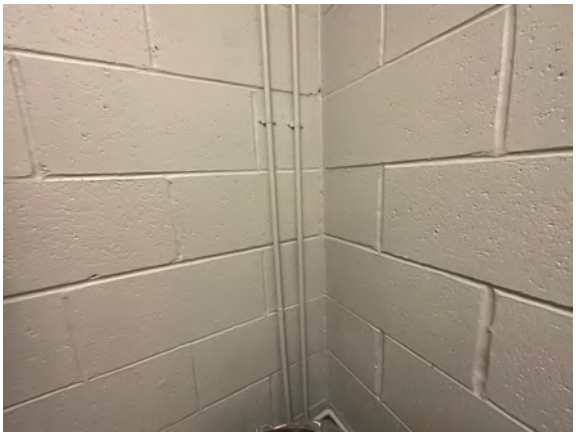
Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2030
Cost	$1,449,470.69

C Interiors
C10 Interior Construction

Element Description	
Name	C101001 - Fixed Partitions - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	840 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$161,190.21

Description
Interior fixed partitions include concrete masonry unit (CMU) walls.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

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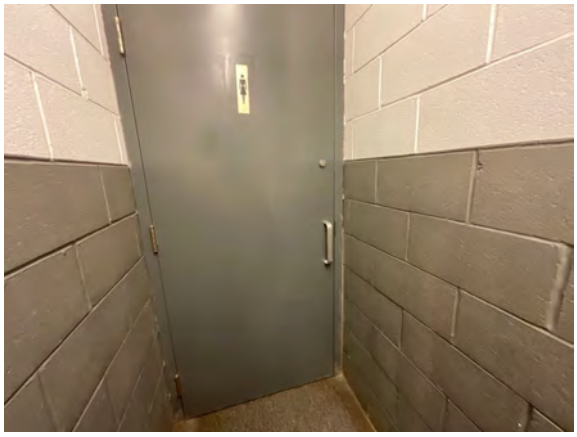

Palmer Rec Center - C101001


Palmer Rec Center - C101001

Element Description	
Name	C101027 - Retractable Partitions - Overhead Counter Shutter - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,770.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,130.76

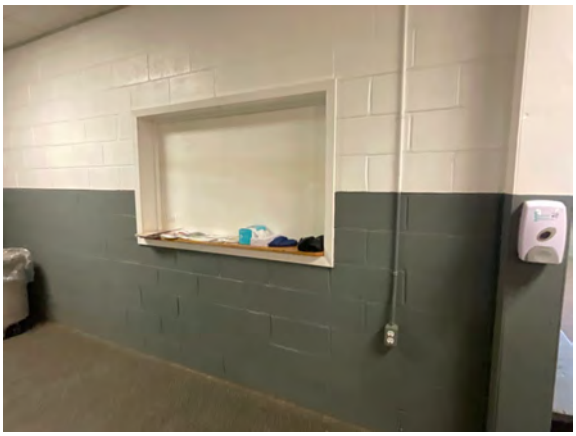
Description

Counter shutter includes a manually operated, painted wood tilt-up panel.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - C101027

Recommendations

Recommendations #1 - Retractable Partitions - Overhead Counter Shutter	
Type	Life Cycle Replacement
Year	2040
Cost	$5,130.76

Element Description	
Name	C102006 - Overhead Doors - Industrial - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	2 / Each
Unit Cost	$15,070.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$41,018.85

Description

Sectional panel overhead doors are provided on the building interior.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - C102006

Palmer Rec Center - C102006

Recommendations

Recommendations #1 - Overhead Doors - Industrial	
Type	Life Cycle Replacement
Year	2040
Cost	$41,018.85

Element Description	
Name	C102007 - Automatic Door Openers - Arena
Installation Year	2019
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	15 Years
Renewal Year	2039
Quantity / Unit of Measure	2 / Each
Unit Cost	$5,030.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$13,691.10

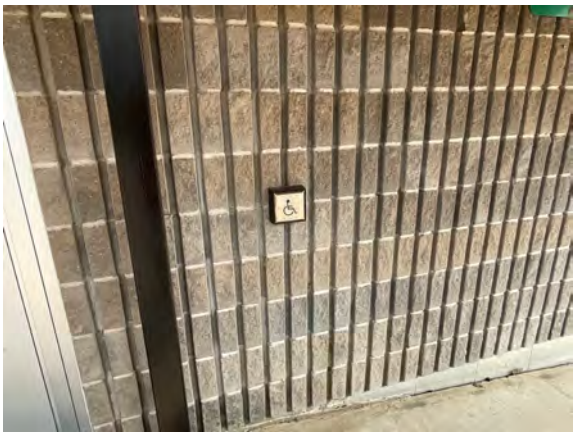
Description

Select entry doors include automatic door openers complete with internal and external push-button controls.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - C102007

Palmer Rec Center - C102007

Recommendations

Recommendations #1 - Automatic Door Openers	
Type	Life Cycle Replacement
Year	2039
Cost	$13,691.10

Element Description	
Name	C102021 - Single Door - Hollow Metal - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	4 / Each
Unit Cost	$3,140.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,093.46

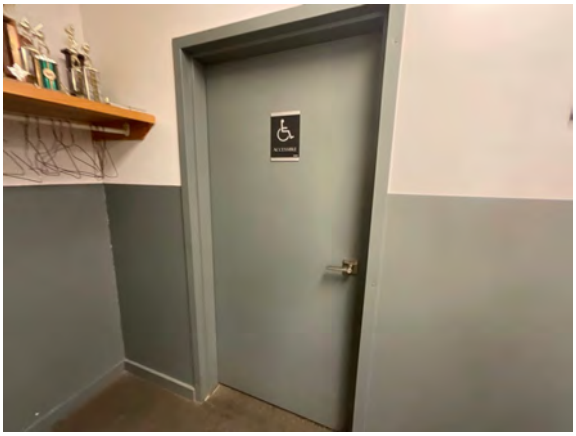
Description

Interior single-door assemblies include painted steel panels that are set within pressed steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - C102021

Palmer Rec Center - C102021

Palmer Rec Center - C102021

Palmer Rec Center - C102021

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2032
Cost	$17,093.46

Element Description	
Name	C102022 - Single Door - Wood - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	4 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$13,718.32

Description

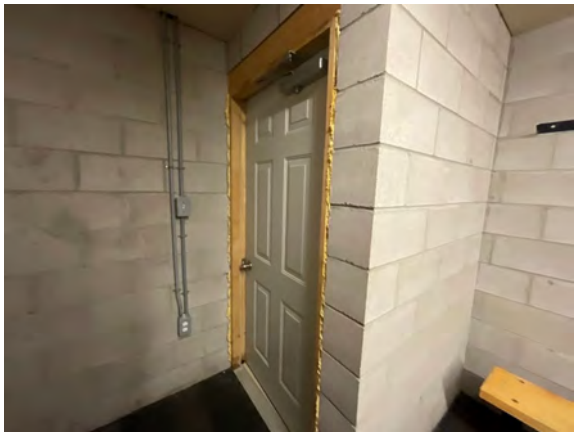
Interior single-door assemblies include wood panels that are set within steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - C102022



Palmer Rec Center - C102022

Palmer Rec Center - C102022

Palmer Rec Center - C102022

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2032
Cost	$13,718.32

Element Description	
Name	C102024 - Double Door - Hollow Metal - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	5 / Each
Unit Cost	$5,660.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$38,514.72

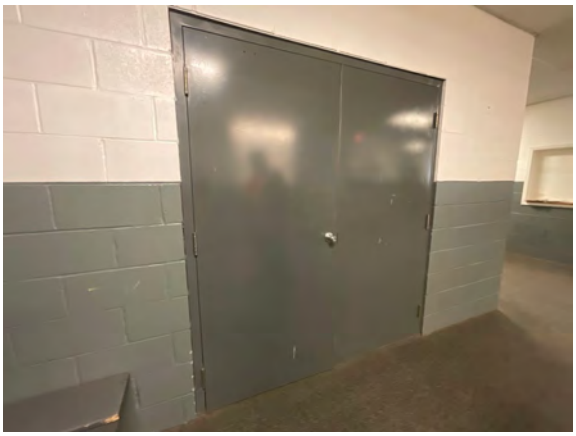
Description

Interior swing-type double-door assemblies include painted steel panels that are hinge-mounted within painted steel frames. Select door panels include vision lites with insulated double-glazing units.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

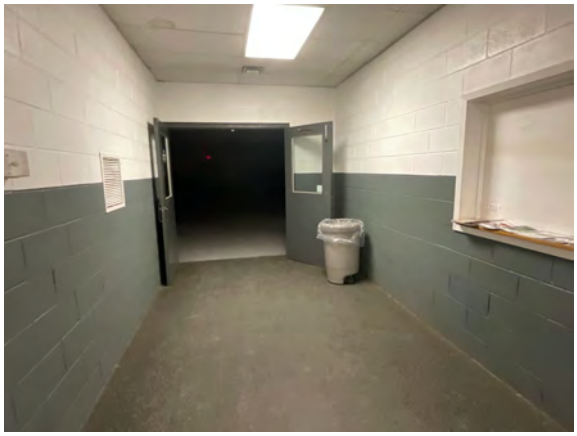
Photos



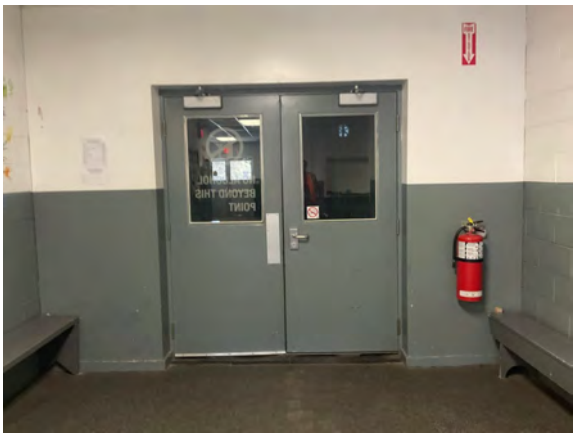
Palmer Rec Center - C102024

Palmer Rec Center - C102024

Palmer Rec Center - C102024



Palmer Rec Center - C102024



Palmer Rec Center - C102024

Recommendations

Recommendations #1 - Double Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2032
Cost	$38,514.72

Element Description	
Name	C103011 - Millwork - Arena
Installation Year	2020
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	40 / SM of Building
Unit Cost	$86.00
Difficulty / Regional / Soft Cost / Replacement	2.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,363.29

Description

Wall-mounted fixed casework consists of stainless steel construction in the kitchen area.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - C103011

Recommendations

Recommendations #1 - Millwork	
Type	Life Cycle Replacement
Year	2045
Cost	$9,363.29

Element Description	
Name	C103028 - Washroom Partitions - Laminated Fiberboard - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	3 / Each
Unit Cost	$1,610.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,573.36

Description

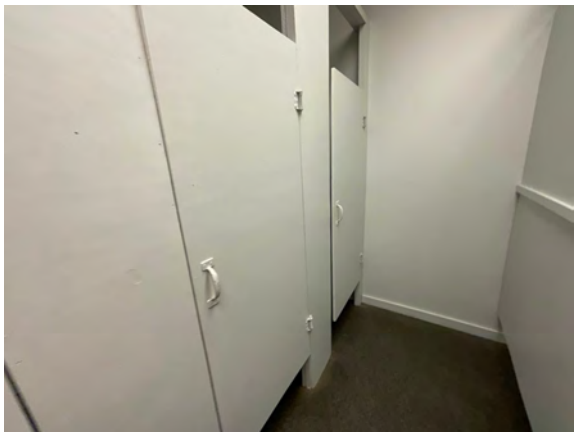
Laminated fiberboard partitions are provided in multi-user washrooms.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - C103028



Palmer Rec Center - C103028

Recommendations

Recommendations #1 - Washroom Partitions - Laminated Fiberboard	
Type	Life Cycle Replacement
Year	2029
Cost	$6,573.36

Element Description	
Name	C104022 - Universal/Gender Neutral Washroom Refurbishment - Arena
Installation Year	2018
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	1 / Per Washroom
Unit Cost	$35,490.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$48,299.90

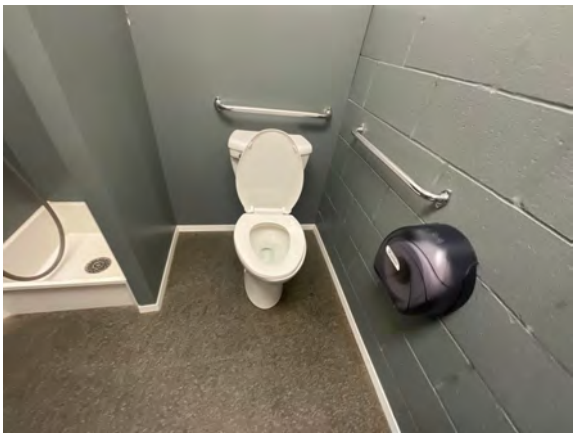
Description

The universal washrooms consist of a floor-mounted water closet with a flush tank and a wall-mounted lavatory. The washroom interior finishes include sheet vinyl floors, painted drywall on wall surfaces, and suspended acoustic panel ceilings.

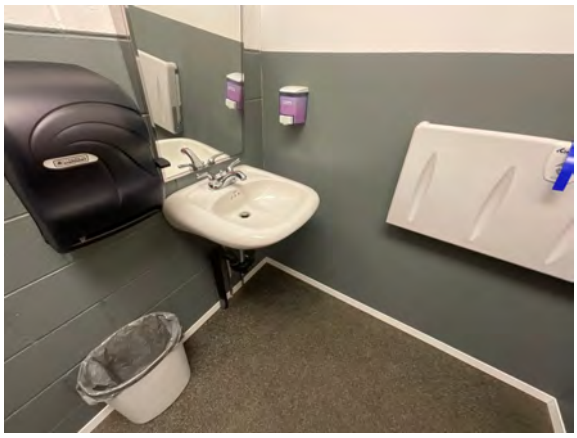
Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - C104022



Palmer Rec Center - C104022

Recommendations

Recommendations #1 - Universal/Gender Neutral Washroom Refurbishment	
Type	Life Cycle Replacement
Year	2043
Cost	$48,299.90

C20 Stairs

Element Description	
Name	C201001 - Interior Stair Construction - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	2 / Per Riser
Unit Cost	$1,140.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,102.95

Description

Interior wood stairs provide access between floor levels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - C201001

C30 Interior Finishes

Element Description	
Name	C301005 - Paint Wall Covering - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2230 / SM Building
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$160,849.97

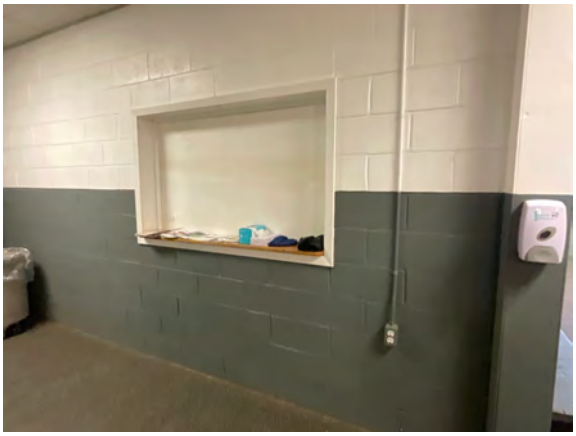
Description

A paint finish is applied to most wall surfaces in the building.

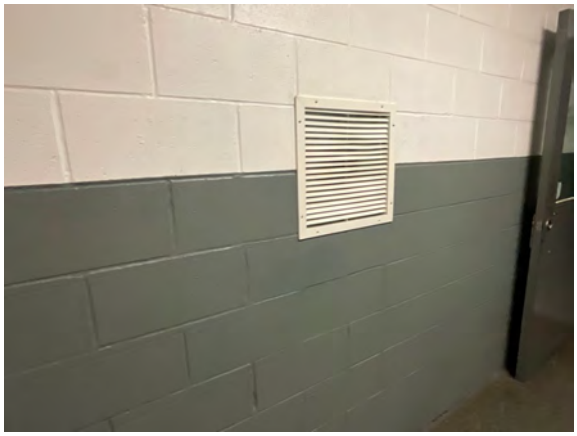
Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - C301005



Palmer Rec Center - C301005

Palmer Rec Center - C301005

Recommendations

Recommendations #1 - Paint Wall Covering	
Type	Life Cycle Replacement
Year	2029
Cost	$160,849.97

Element Description	
Name	C302021 - Rubber / Spring Gym Floor - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	558 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$191,370.50

Description

A rubber finish is applied to interior floor surfaces.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - C302021

Palmer Rec Center - C302021

Palmer Rec Center - C302021

Recommendations

Recommendations #1 - Rubber / Spring Gym Floor	
Type	Life Cycle Replacement
Year	2030
Cost	$191,370.50

Element Description	
Name	C302022 - Vinyl Tile / Plank Floor - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	250 / SM
Unit Cost	$132.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$44,911.15

Description

Interior floor surfaces are finished with vinyl tiles.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Palmer Rec Center - C302022

Palmer Rec Center - C302022

Recommendations

Recommendations #1 - Vinyl Tile / Plank Floor	
Type	Life Cycle Replacement
Year	2029
Cost	$44,911.15

Element Description	
Name	C302099 - Other Floor Finishes - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	30 / Lump Sum
Unit Cost	$5,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$222,922.63

Description

Interior ice rink floor surfaces are finished with a plastic modular interlock tile system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - C302099

Recommendations

Recommendations #1 - Other Floor Finishes	
Type	Life Cycle Replacement
Year	2030
Cost	$222,922.63

Element Description	
Name	C303004 - Acoustic Tile Ceiling - Arena
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	30 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	558 / SM
Unit Cost	$88.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$66,827.79

Description

Acoustic tiles are applied to interior ceilings in the washroom and hall.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged surfaces, staining, and discoloration, gaps in material coverage. The deterioration is anticipated to progress due to age and ongoing building activities and may lead to a weakening of integrity, and a loss of marketability. Replacement is recommended in the short term.

Photos

Palmer Rec Center - C303004

Palmer Rec Center - C303004

Palmer Rec Center - C303004

Palmer Rec Center - C303004

Recommendations

Recommendations #1 - Acoustic Tile Ceiling	
Type	Life Cycle Replacement
Year	2026
Cost	$66,827.79

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Arena
Installation Year	2020
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	31 Years
Renewal Year	2055
Quantity / Unit of Measure	7 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,431.93

Description

The plumbing fixtures include floor-mounted vitreous china water closets. The water closets are equipped with manual flush devices.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D201001

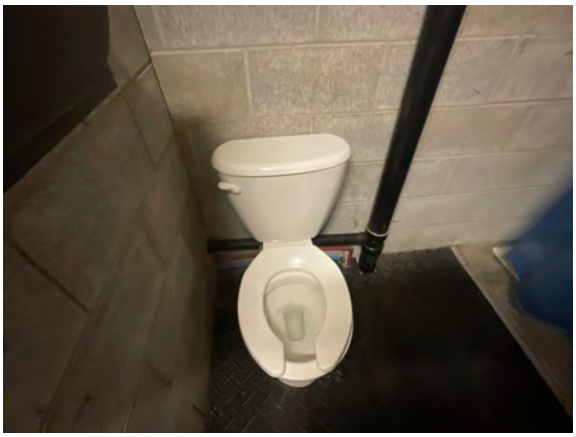
Palmer Rec Center - D201001

Palmer Rec Center - D201001

Palmer Rec Center - D201001

Palmer Rec Center - D201001

Palmer Rec Center - D201001



Palmer Rec Center - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2055
Cost	$11,431.93

Element Description	
Name	D201002 - Urinals - Arena
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	3 Years
Renewal Year	2027
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,266.27

Description

The plumbing fixtures include wall-mounted vitreous china urinals. The urinals are equipped with manual flush valves.

Condition Narrative

No significant deficiencies were observed or reported. However the urinals are energy inefficient. Replacement is recommended in the short term.

Photos

Palmer Rec Center - D201002

Recommendations

Recommendations #1 - Urinals	
Type	Life Cycle Replacement
Year	2027
Cost	$3,266.27

Element Description	
Name	D201003 - Lavatories - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	6 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,798.80

Description

The plumbing fixtures include vitreous china lavatories. The lavatories are equipped with manual tap-sets.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D201003

Palmer Rec Center - D201003

Palmer Rec Center - D201003

Recommendations

Recommendations #1 - Lavatories	
Type	Life Cycle Replacement
Year	2045
Cost	$9,798.80

Element Description	
Name	D201004 - Sinks - Arena
Installation Year	2020
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	31 Years
Renewal Year	2055
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

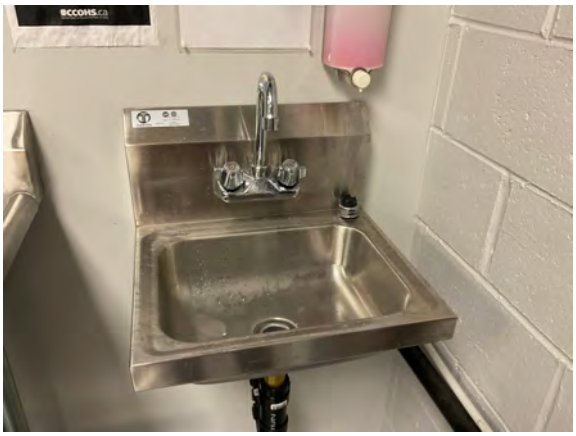
Description

The plumbing fixtures include a single-bowl stainless steel handwash sink equipped with manual tap set and located in the kitchen.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - D201004

Recommendations

Recommendations #1 - Sinks	
Type	Life Cycle Replacement
Year	2055
Cost	$1,633.13

Element Description	
Name	D201004 - Sinks - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04688 / 1.30000 / 1.0000
Element Cost	$816.57

Description

The plumbing fixtures include a plastic utility sink with manual valve set located in the kitchen.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Palmer Rec Center - D201016

Recommendations

Recommendations #1 - Sinks	
Type	Life Cycle Replacement
Year	2045
Cost	$816.57

Element Description	
Name	D201011 - Showers (Valve Set) - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,800.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,899.40

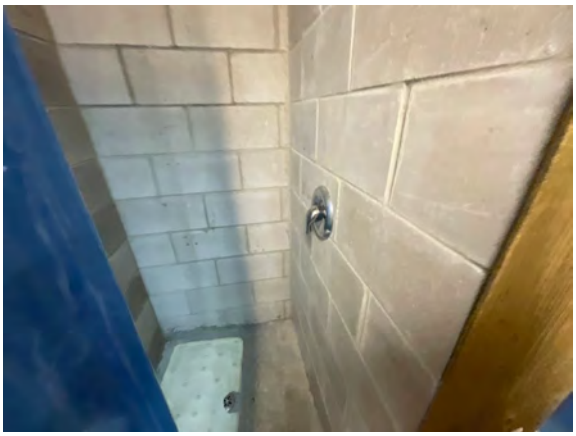
Description

The plumbing fixtures include through-wall shower valve sets for shower stalls with manual valve sets located in changing rooms.

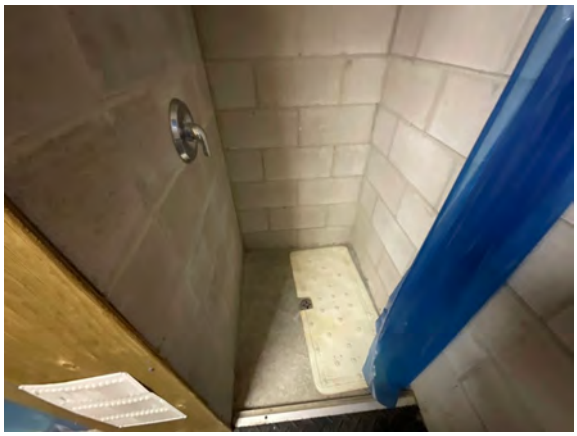
Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

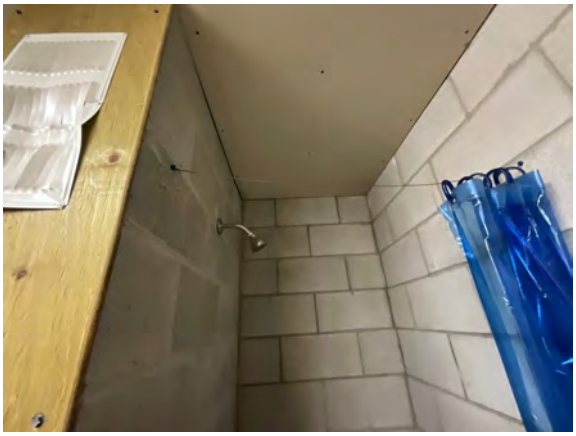
Photos



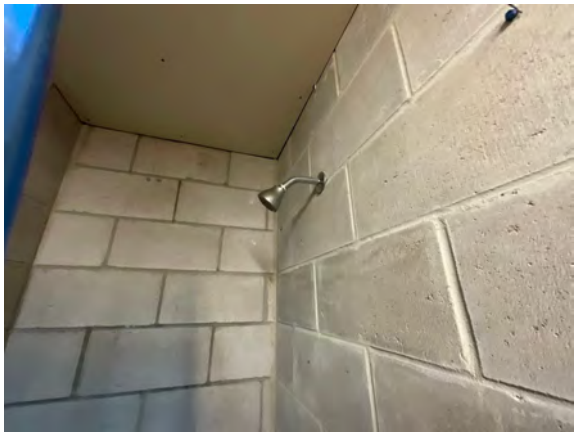
Palmer Rec Center - D201011



Palmer Rec Center - D201011



Palmer Rec Center - D201011



Palmer Rec Center - D201011

Recommendations

Recommendations #1 - Showers (Valve Set)	
Type	Life Cycle Replacement
Year	2035
Cost	$4,899.40

Element Description	
Name	D201015 - Drinking Water Fountains - Refrigerated - Arena
Installation Year	2020
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	1 / Each
Unit Cost	$5,250.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$7,144.96

Description

The plumbing fixtures include a wall-mounted stainless steel refrigerated water fountain with a bottle refill station.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D201015

Recommendations

Recommendations #1 - Drinking Water Fountains - Refrigerated	
Type	Life Cycle Replacement
Year	2035
Cost	$7,144.96

Element Description	
Name	D201016 - Custodial Sinks - Arena
Installation Year	2018
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	1 / Each
Unit Cost	$2,400.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$979.88

Description

The plumbing fixtures include a floor-mounted custodial sink with manual valve set.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D201016

Recommendations

Recommendations #1 - Custodial Sinks	
Type	Life Cycle Replacement
Year	2048
Cost	$979.88

Element Description	
Name	D201043 - Commercial Kitchen Sinks - Arena
Installation Year	2020
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	26 Years
Renewal Year	2050
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,440.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,681.65

Description

The plumbing fixtures include a heavy-duty single-basin stainless steel sink with manually operated tap set located in the kitchen.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D201043

Recommendations

Recommendations #1 - Commercial Kitchen Sinks	
Type	Life Cycle Replacement
Year	2050
Cost	$4,681.65

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	2230 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$182,094.31

Description

The building domestic water distribution, where visible, consists of cold and hot water copper pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D202001

Palmer Rec Center - D202001

Palmer Rec Center - D202001

Palmer Rec Center - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2032
Cost	$182,094.31

Element Description	
Name	D202008 - Domestic Water Expansion Tanks/Pressure Tanks - Arena
Installation Year	2010
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,590.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,123.37

Description

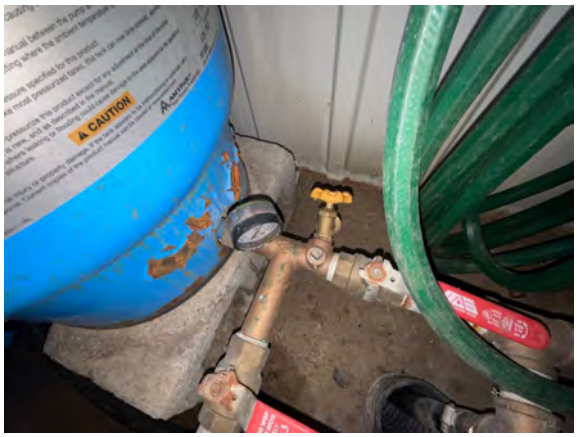
The domestic water distribution includes a pressure tank with a regulator. The system is manufactured by Well-x and is located in the mechanical room.

Condition Narrative

Deficiencies observed or reported during the assessment include corrosion along the bottom of the tank. Replacement is recommended in the short term.

Photos

Palmer Rec Center - D202023



Palmer Rec Center - D202023

Recommendations

Recommendations #1 - Domestic Water Expansion Tanks/Pressure Tanks	
Type	Life Cycle Replacement
Year	2024
Cost	$3,123.37

Element Description	
Name	D202032 - Domestic Water Heaters - Commercial Gas-Fired - Arena
Installation Year	2018
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	9 Years
Renewal Year	2033
Quantity / Unit of Measure	121 / Liter
Unit Cost	$57.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,386.43

Description

The domestic water distribution includes a commercial-grade propane-fired domestic hot water heater. The water heater has a storage capacity of 121 L. The unit is manufactured by John Wood, model JW6F307 400, serial number 1545A023295, and is located in the mechanical room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D202032

Palmer Rec Center - D202032

Recommendations

Recommendations #1 - Domestic Water Heaters - Commercial Gas-Fired	
Type	Life Cycle Replacement
Year	2033
Cost	$9,386.43

Element Description	
Name	D202032 - Domestic Water Heaters - Commercial Gas-Fired - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	181 / Liter
Unit Cost	$57.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$14,040.86

Description

The domestic water distribution includes a commercial-grade propane-fired domestic hot water heater. The water heater has a storage capacity of 181 L. The unit is manufactured by Bradford White, model PDX250T6FSX, serial number FC11661216, and is located in the changing room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D202032

Palmer Rec Center - D202032

Recommendations

Recommendations #1 - Domestic Water Heaters - Commercial Gas-Fired	
Type	Life Cycle Replacement
Year	2029
Cost	$14,040.86

Element Description	
Name	D202032 - Domestic Water Heaters - Commercial Gas-Fired - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	181 / Liter
Unit Cost	$57.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$14,040.86

Description

The domestic water distribution includes a commercial-grade propane-fired domestic hot water heater. The water heater has a storage capacity of 181 L. The unit is manufactured by Bradford White, model PDX250T6FSX, serial number FA11506740, and is located in the changing room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D202032

Palmer Rec Center - D202032

Recommendations

Recommendations #1 - Domestic Water Heaters - Commercial Gas-Fired	
Type	Life Cycle Replacement
Year	2029
Cost	$14,040.86

Element Description	
Name	D202032 - Domestic Water Heaters - Commercial Gas-Fired - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	181 / Liter
Unit Cost	$57.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$14,040.86

Description

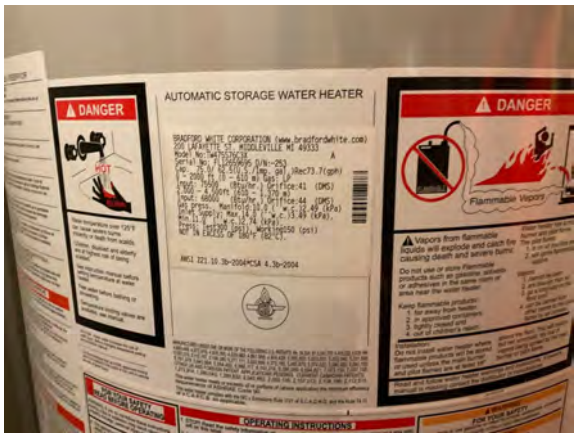
The domestic water distribution includes a commercial-grade propane-fired domestic hot water heater. The water heater has a storage capacity of 181 L. The unit is manufactured by Bradford White, model TW475S76C3X, serial number FL12659695, and is located in the mechanical room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D202032



Palmer Rec Center - D202032

Recommendations

Recommendations #1 - Domestic Water Heaters - Commercial Gas-Fired	
Type	Life Cycle Replacement
Year	2029
Cost	$14,040.86

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	2230 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$182,094.31

Description

The building's sanitary waste drainage, where visible, consists of PVC pipe drain lines and risers. The drainage includes steel pipe vents, traps, and floor drains. The sanitary waste drainage connects to the site's septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D203001

Palmer Rec Center - D203001

Palmer Rec Center - D203001

Palmer Rec Center - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2042
Cost	$182,094.31

D30 HVAC

Element Description	
Name	D301002 - Natural Gas Supply Piping and Fittings - Propane Supply - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	26 Years
Renewal Year	2050
Quantity / Unit of Measure	2230 / SM
Unit Cost	$30.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$91,047.15

Description

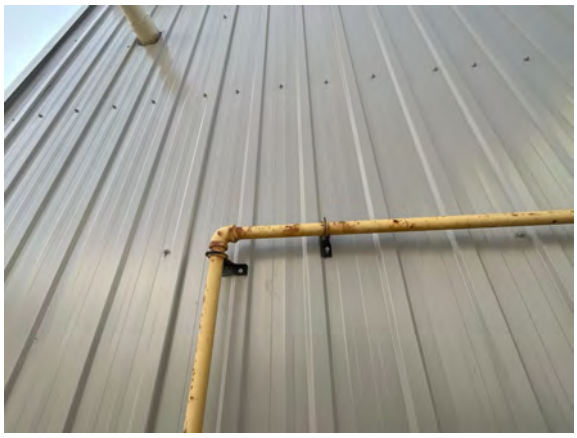
The building propane supply consists of steel piping and fittings from the utility meter to the gas-fired equipment. The piping is painted with a corrosion inhibiting coating where exposed.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D301002



Palmer Rec Center - D301002

Palmer Rec Center - D301002

Palmer Rec Center - D301002

Recommendations

Recommendations #1 - Natural Gas Supply Piping and Fittings	
Type	Life Cycle Replacement
Year	2050
Cost	$91,047.15

Element Description	
Name	D302003 - Fuel Fired Forced Air Furnaces - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	4 Years
Renewal Year	2028
Quantity / Unit of Measure	139 / MBH
Unit Cost	$66.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$12,485.30

Description

Building heating consists of a propane-fired forced air furnace. The furnace is manufactured by Newmac, model 5010029G serial number 082504D039608, and has an input heating capacity of 139 MBH. The unit is located in the mechanical room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D302003

Palmer Rec Center - D302003

Palmer Rec Center - D302003

Palmer Rec Center - D302003

Recommendations

Recommendations #1 - Fuel Fired Forced Air Furnaces	
Type	Life Cycle Replacement
Year	2028
Cost	$12,485.30

Element Description	
Name	D303021 - Refrigerant DX Condensing Units - 1 to 5 Tons - Arena
Installation Year	2010
Condition	3 - Fair
Expected Useful Life	18 Years
Remaining Useful Life	4 Years
Renewal Year	2028
Quantity / Unit of Measure	1 / Each
Unit Cost	$5,030.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,845.55

Description

Building cooling includes a split system air conditioning system. The condensing unit is manufactured by Goodman Manufacturing CO., model CLJ60-1. The condenser is installed on grade. The system includes the refrigerant piping and evaporator unit.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. The unit is charged with an HCFC refrigerant, an ozone deleting substance. HCFC refrigerants are no longer available for purchase as per legislation enacted by those authorities having jurisdiction. In the event of equipment failure or a gas leak the unit likely will need to be replaced as it will unable to be re-charged. Replacement is recommended in the short term.

Photos

Palmer Rec Center - D303041

Palmer Rec Center - D303041

Recommendations

Recommendations #1 - Refrigerant DX Condensing Units - 1 to 5 Tons	
Type	Life Cycle Replacement
Year	2028
Cost	$6,845.55

Element Description	
Name	D304001 - Air Distribution Systems - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	17 Years
Renewal Year	2041
Quantity / Unit of Measure	630 / SM Building
Unit Cost	$178.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$152,616.26

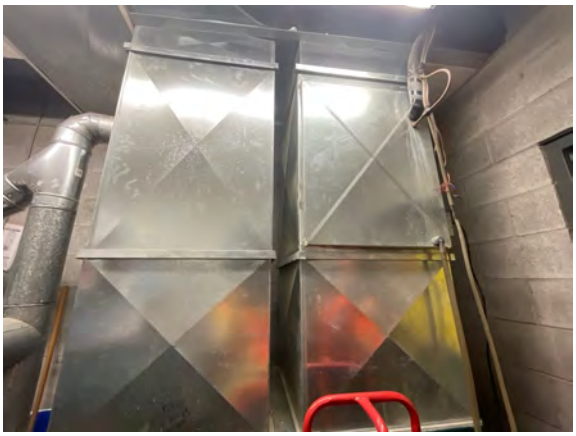
Description

The building air distribution, where visible, consists of a network of galvanized sheet metal supply, return, and exhaust air ductwork. The distribution includes dampers, diffusers, and grilles.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - D304001

Recommendations

Recommendations #1 - Air Distribution Systems	
Type	Life Cycle Replacement
Year	2041
Cost	$152,616.26

Element Description	
Name	D304032 - Exhaust Fans - Axial - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	1 / Each
Unit Cost	$2,300.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,130.17

Description

Building ventilation includes an axial fan for ventilation in the ice rink.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D304034

Recommendations

Recommendations #1 - Exhaust Fans - Axial	
Type	Life Cycle Replacement
Year	2035
Cost	$3,130.17

Element Description	
Name	D304032 - Exhaust Fans - Axial - Arena
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	25 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	1 / Each
Unit Cost	$2,300.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,130.17

Description

Building ventilation includes an axial fan for ventilation in the ice rink.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Palmer Rec Center - D304034

Recommendations

Recommendations #1 - Exhaust Fans - Axial	
Type	Life Cycle Replacement
Year	2026
Cost	$3,130.17

Element Description	
Name	D304033 - Exhaust Fans - Residential - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,150.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,130.17

Description

Building ventilation includes exhaust fans for ventilation in washrooms.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D304033

Palmer Rec Center - D304033

Recommendations

Recommendations #1 - Exhaust Fans - Residential	
Type	Life Cycle Replacement
Year	2035
Cost	$3,130.17

Element Description	
Name	D304034 - Exhaust Fans - Large
Installation Year	2010
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	1 / Each
Unit Cost	$9,420.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$12,820.09

Description

Building ventilation includes a cabinet high-velocity exhaust fan for the range hood in the kitchen.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D304033

Palmer Rec Center - D304033

Recommendations

Recommendations #1 - Exhaust Fans - Large	
Type	Life Cycle Replacement
Year	2030
Cost	$12,820.09

Element Description	
Name	D305009 - Unit Heaters (Electric) - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	6 / Each
Unit Cost	$2,870.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$23,435.46

Description

The building HVAC includes ceiling-suspended electric unit heaters. The units are located in the changing rooms and loading zone.

Condition Narrative

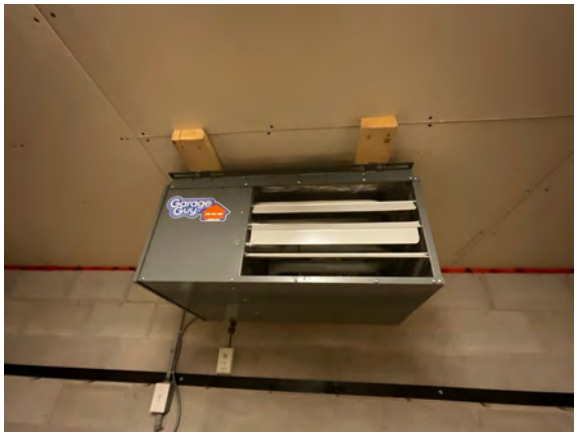
No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Palmer Rec Center - D305015

Palmer Rec Center - D305015

Palmer Rec Center - D305015



Palmer Rec Center - D305015

Palmer Rec Center - D305015

Recommendations

Recommendations #1 - Unit Heaters (Electric)	
Type	Life Cycle Replacement
Year	2029
Cost	$23,435.46

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Arena
Installation Year	2017
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	7 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,457.86

Description

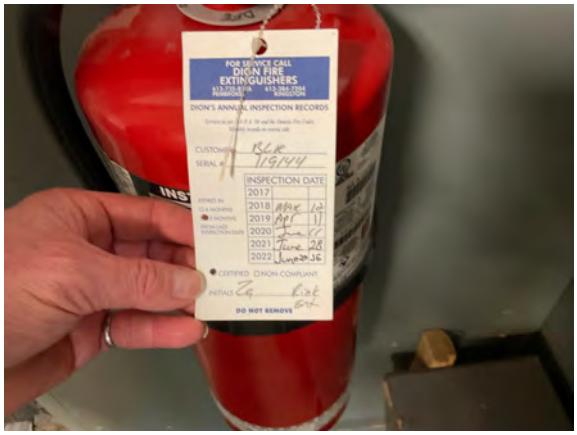
ABC Type Fire Extinguishers are located in the corridors and common areas. A type K fire extinguisher is provided for the kitchen.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

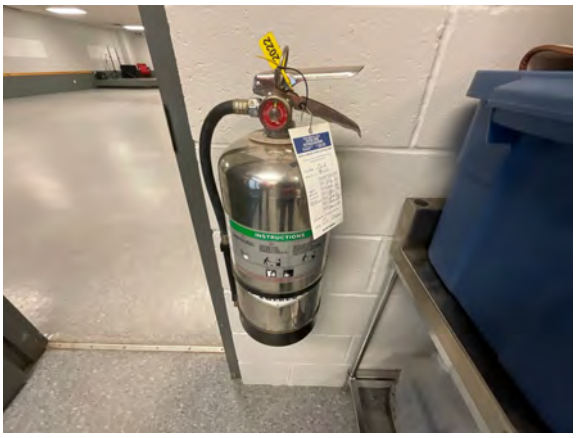
Palmer Rec Center - D403002



Palmer Rec Center - D403002

Palmer Rec Center - D403002

Palmer Rec Center - D403002



Palmer Rec Center - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$2,457.86

Element Description	
Name	D409005 - Dry Chemical Fire Extinguishing Systems (Kitchen Hood)
Installation Year	2010
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	1 / Each
Unit Cost	$5,250.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$7,144.96

Description

The building fire protection includes a dry chemical fire extinguishing system serving the kitchen range hood. The system is manufactured by Amerex and includes chemical storage tanks, piping, nozzles, and controls. The system was last inspected in 2023.

Condition Narrative

No significant deficiencies were observed or reported. Minor corrosion was observed on fittings. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D409005

Palmer Rec Center - D409005

Palmer Rec Center - D409005

Recommendations

Recommendations #1 - Dry Chemical Fire Extinguishing Systems (Kitchen Hood)	
Type	Life Cycle Replacement
Year	2030
Cost	$7,144.96

D50 Electrical

Element Description	
Name	D501025 - Main Service Disconnects - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	1 / Each
Unit Cost	$12,560.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,093.46

Description

The electrical service includes a main service disconnect The disconnect is rated 400 A at 600V and is located in the main hall closet.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D501025

Palmer Rec Center - D501025

Recommendations

Recommendations #1 - Main Service Disconnects	
Type	Life Cycle Replacement
Year	2032
Cost	$17,093.46

Element Description	
Name	D501031 - Electrical Distribution - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	840 / SM Building
Unit Cost	$79.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$90,312.24

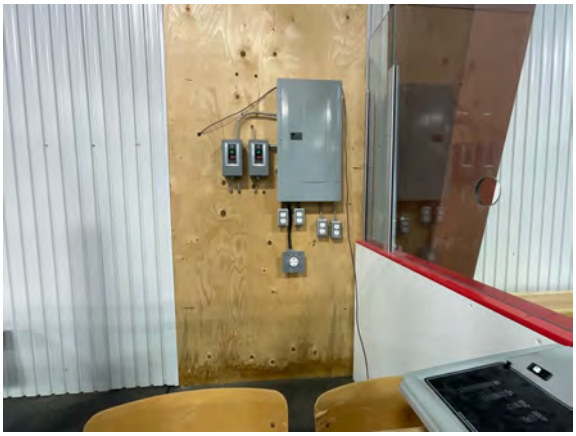
Description

The electrical distribution consists of switchboards, panelboards, disconnects, feeders, and associated equipment. The feeders are insulated copper wire in rigid metal conduit. The distribution is fed by the main service disconnect.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

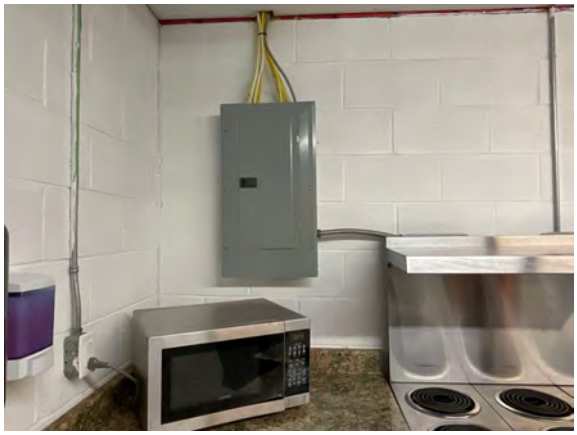
Photos



Palmer Rec Center - D501003

Palmer Rec Center - D501003

Palmer Rec Center - D501003



Palmer Rec Center - D501003

Recommendations

Recommendations #1 - Electrical Distribution	
Type	Life Cycle Replacement
Year	2032
Cost	$90,312.24

Element Description	
Name	D502001 - Branch Wiring and Devices - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	17 Years
Renewal Year	2041
Quantity / Unit of Measure	803 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$154,090.16

Description

The building branch wiring consists of insulated copper wire in rigid metal conduit and flexible armored cable. The wiring includes junction boxes, devices, switches and receptacles.

Condition Narrative

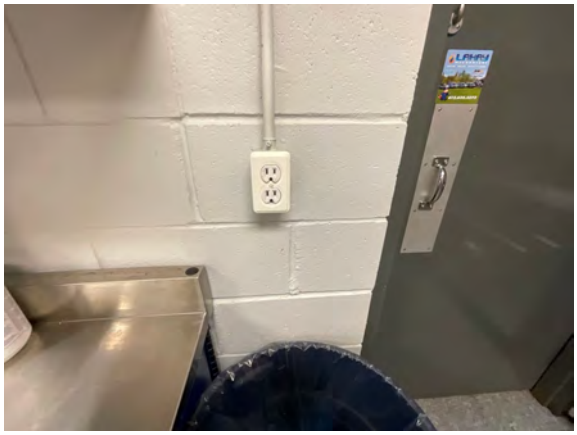
No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D502001

Palmer Rec Center - D502001

Palmer Rec Center - D502001



Palmer Rec Center - D502001

Recommendations

Recommendations #1 - Branch Wiring and Devices	
Type	Life Cycle Replacement
Year	2041
Cost	$154,090.16

Element Description	
Name	D502002 - Interior Lighting - Common Areas
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	3 Years
Renewal Year	2027
Quantity / Unit of Measure	803 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$122,397.86

Description

The building interior lighting consists of linear light fixtures in the hall, change rooms, corridors, lobbies, and entrances. Linear fixtures appear to be T8.

Condition Narrative

No significant deficiencies were observed or reported. However the lighting is energy inefficient. Replacement with upgrade to LED is recommended.

Photos

Palmer Rec Center - D502002

Palmer Rec Center - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2027
Cost	$122,397.86

Element Description	
Name	D502002 - Interior Lighting - Arena
Installation Year	2016
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	27 Years
Renewal Year	2051
Quantity / Unit of Measure	1222 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$186,264.24

Description

The building's arena interior lighting consists of linear light fixtures in the ice rink. Linear fixtures appear to be LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D502002

Palmer Rec Center - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2051
Cost	$186,264.24

Element Description	
Name	D502002 - Interior Lighting - Common Areas
Installation Year	2010
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	205 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$31,247.27

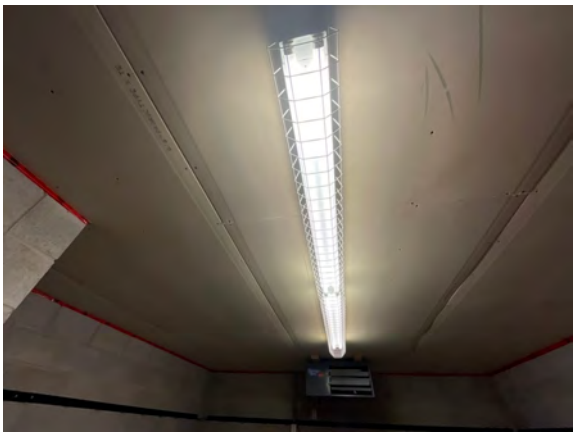
Description

The building interior lighting consists of linear light fixtures in the change rooms, corridors, lobbies, and entrances. Linear fixtures appear to be T8.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - D502002

Palmer Rec Center - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2045
Cost	$31,247.27

Element Description	
Name	D502041 - Exterior Lighting - Arena
Installation Year	2022
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	2 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,562.36

Description

The building exterior lighting consists of wall pack fixtures along the perimeter of the building and canopy pot light fixtures at entrances. The wall fixtures are LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D502041

Palmer Rec Center - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2042
Cost	$1,562.36

Element Description	
Name	D502051 - Exit Lighting - Arena
Installation Year	2019
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	30 Years
Renewal Year	2054
Quantity / Unit of Measure	1638 / SM Building
Unit Cost	$4.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,916.91

Description

The building exit lighting consists of illuminated single-sided combination exit signs along egresses and at exits. The installation has different years 2018, 2019, 2020, and 2021, therefore averaging them to 2019.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D502051

Palmer Rec Center - D502051

Palmer Rec Center - D502051

Palmer Rec Center - D502051

Element Description	
Name	D502051 - Exit Lighting - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	592 / SM Building
Unit Cost	$4.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,222.72

Description

The building exit lighting consists of illuminated single-sided combination exit signs along egresses and at exits.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D502051

Palmer Rec Center - D502051

Palmer Rec Center - D502051

Palmer Rec Center - D502051

Palmer Rec Center - D502051

Recommendations

Recommendations #1 - Exit Lighting	
Type	Life Cycle Replacement
Year	2027
Cost	$3,222.72

Element Description	
Name	D509003 - Emergency Lighting - Arena
Installation Year	1992
Condition	3 - Fair
Expected Useful Life	20 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	2230 / SM Building
Unit Cost	$6.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$18,209.43

Description

The building emergency lighting consists of wall-mounted emergency battery pack units and a central battery unit with local and remote quartz light heads. The system includes battery units, light heads, and wiring.

Condition Narrative

No significant deficiencies were observed or reported. However the lighting is energy inefficient. Replacement with upgrade to LED is recommended.

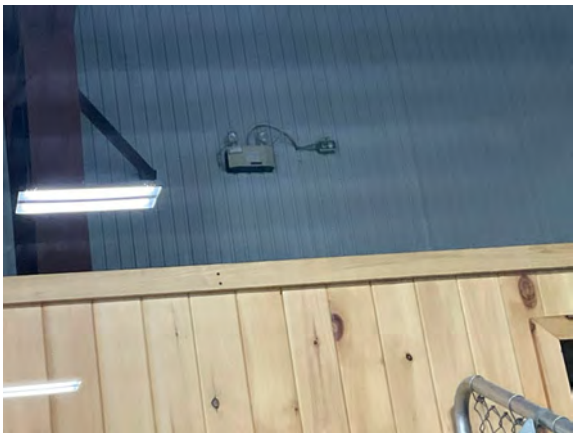
Photos

Palmer Rec Center - D509003

Palmer Rec Center - D509003

Palmer Rec Center - D509003

Palmer Rec Center - D509003



Palmer Rec Center - D509003

Palmer Rec Center - D509003

Palmer Rec Center - D509003

Recommendations

Recommendations #1 - Emergency Lighting	
Type	Life Cycle Replacement
Year	2026
Cost	$18,209.43

Element Description	
Name	D509032 - Automatic Transfer Switches - 400A to 800A - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	26 Years
Renewal Year	2050
Quantity / Unit of Measure	1 / Each
Unit Cost	$13,820.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$18,808.25

Description

The electrical distribution includes a manual transfer switch. The transfer switch is rated at 120/240V and is located exterior at the front entrance.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - D509031

Palmer Rec Center - D509031

Palmer Rec Center - D509031

Recommendations

Recommendations #1 - Automatic Transfer Switches - 400A to 800A	
Type	Life Cycle Replacement
Year	2050
Cost	$18,808.25

E Equipment & Furnishings
E10 Equipment

Element Description	
Name	E101004 - Commercial Kitchens - Arena
Installation Year	2020
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	20 / SM
Unit Cost	$5,030.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$136,910.97

Description
The building includes a commercial kitchen with a combination gas-fired cooking range and oven, fryer, dishwasher, and associated equipment.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Palmer Rec Center - E101004

Palmer Rec Center - E101004

Palmer Rec Center - E101004

Palmer Rec Center - E101004

Palmer Rec Center - E101004

Recommendations

Recommendations #1 - Commercial Kitchens	
Type	Life Cycle Replacement
Year	2045
Cost	$136,910.97

E20 Furnishings

Element Description	
Name	E201003 - Bleachers - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	120 / Per Seat
Unit Cost	$691.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$112,849.48

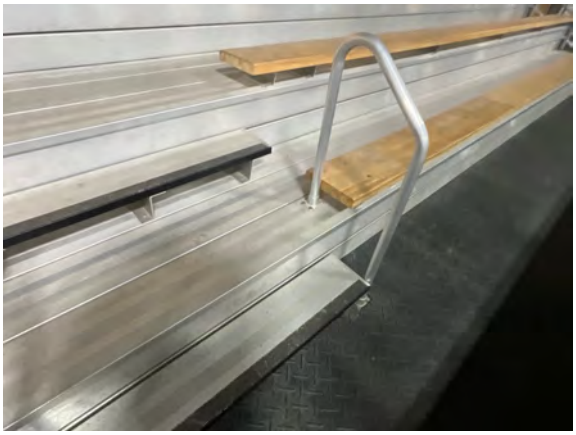
Description

The building is provided with fixed bleachers mounted onto metal frames secured to the floor and comprised of continuous wood bench seats. The bleachers are located in the ice rink.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - E201003

Palmer Rec Center - E201003

Palmer Rec Center - E201003

Recommendations

Recommendations #1 - Bleachers	
Type	Life Cycle Replacement
Year	2035
Cost	$112,849.48

F Special Construction & Demolition
F10 Special Construction

Element Description	
Name	F104021 - Ice Rink Slab and Piping - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	36 Years
Renewal Year	2060
Quantity / Unit of Measure	1600 / SM
Unit Cost	$351.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$764,306.15

Description
The building includes a former seasonal operated ice rink. The ice rink consists of a concrete pad.

Condition Narrative
As reported, the concrete on the the surface of the ice rink slab had "shail" . A plastic modular floor has been placed on top to permit non-ice activities in the rink. Replacement is not anticipated in the short term.

Recommendations

Recommendations #1 - Ice Rink Slab and Piping	
Type	Life Cycle Replacement
Year	2042
Cost	$764,306.15

Element Description	
Name	F104023 - Ice Rink Dasher Boards - Indoor - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	170 / LM
Unit Cost	$1,640.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$379,431.19

Description

The ice rink includes dasher boards in metal frame anchored to the concrete floor by metal columns. The facing is high-density polyethylene (HDPE), with tempered glass shielding.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - F104023

Palmer Rec Center - F104023

Palmer Rec Center - F104023

Palmer Rec Center - F104023

Recommendations

Recommendations #1 - Ice Rink Dasher Boards - Indoor	
Type	Life Cycle Replacement
Year	2029
Cost	$379,431.19

Element Description	
Name	F104026 - Ice Rink Scoreboards - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$12,560.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,093.46

Description

The ice rink is provided with a wall-mounted incandescent scoreboard.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - F104026

Palmer Rec Center - F104026

Recommendations

Recommendations #1 - Ice Rink Scoreboards	
Type	Life Cycle Replacement
Year	2029
Cost	$17,093.46

Element Description	
Name	F104099 - Other Special Facilities - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Lump Sum
Unit Cost	$5,000.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,804.72

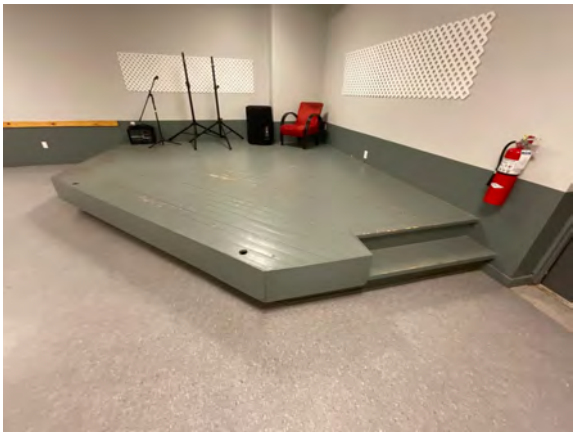
Description

The building includes a wooden stage in the hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - F104099

Recommendations

Recommendations #1 - Other Special Facilities	
Type	Life Cycle Replacement
Year	2029
Cost	$6,804.72

G Building Sitework
G20 Site Improvements

Element Description	
Name	G202024 - Gravel Paved Surface - Parking Area - Arena
Installation Year	1992
Condition	4 - Poor
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1000 / SM
Unit Cost	$32.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$43,550.21

Description
The parking located to the front of the building is gravel paved.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - G202024

Recommendations

Recommendations #1 - Gravel Paved Surface - Parking Area	
Type	Life Cycle Replacement
Year	2029
Cost	$43,550.21

Element Description	
Name	G203026 - Exterior Site Stairs - Concrete - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	26 Years
Renewal Year	2050
Quantity / Unit of Measure	1 / Per Riser
Unit Cost	$1,260.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,714.79

Description

Concrete steps with metal railings provide access to the main entrance doors from grade.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - G203026

Palmer Rec Center - G203026

Recommendations

Recommendations #1 - Exterior Site Stairs - Concrete	
Type	Life Cycle Replacement
Year	2050
Cost	$1,714.79

Element Description	
Name	G203030 - Exterior Ramps - Concrete - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	26 Years
Renewal Year	2050
Quantity / Unit of Measure	4 / SM
Unit Cost	$1,260.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,859.16

Description

Concrete stairs provide access to the exterior doors from grade. The concrete stairs are generally unfinished.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - G203030

Recommendations

Recommendations #1 - Exterior Ramps - Concrete	
Type	Life Cycle Replacement
Year	2050
Cost	$6,859.16

G30 Site Mechanical Utilities

Element Description	
Name	G301021 - Water Supply Service - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	36 Years
Renewal Year	2060
Quantity / Unit of Measure	100 / LM
Unit Cost	$218.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$29,668.58

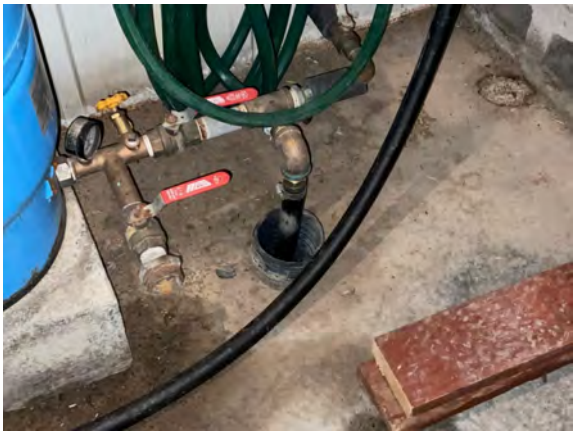
Description

The underground water supply service is assumed to be equivalent to 40mm PVC piping in a 1 M. trench from the municipality Township Office domestic water well to the building service room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Palmer Rec Center - G301021

Recommendations

Recommendations #1 - Water Supply Service	
Type	Life Cycle Replacement
Year	2060
Cost	$29,668.58

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,198.71

Description

The building site includes a septic system comprising an underground concrete septic tank presumably connected to a drain field.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.
Note: No photo available

Recommendations

Recommendations #1 - Septic Tank - 4000 Gallons	
Type	Life Cycle Replacement
Year	2042
Cost	$51,198.71

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Arena
Installation Year	2010
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	36 Years
Renewal Year	2060
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,198.71

Description

The building site includes a septic system comprising an underground concrete septic tank presumably connected to a drain field.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.
Note: No photo available

G40 Site Electrical Utilities

Element Description	
Name	G401011 - Electrical Service - Arena
Installation Year	1992
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	15 / LM
Unit Cost	$930.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$18,985.17

Description

The underground electrical service is assumed to be equivalent to 400A 3 wire single phase from the utility to the building electrical service equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Rec Center - G401011

Palmer Rec Center - G401011

Recommendations

Recommendations #1 - Electrical Service	
Type	Life Cycle Replacement
Year	2042
Cost	$18,985.17

14 PALMER STORAGE SHED

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Palmer Storage Shed

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Palmer storage shed, located at 42 Burnt Bridge Rd, Palmer Rapids, ON, was reportedly constructed in 1974. The original building is a single-storey building and has a reported gross floor area of approximately 80 SM (861 SF). The building is used as a storage. The site visit was done on May 16, 2023.

Facility No	PSS1
Name	Palmer Storage Shed
Address	42 Burnt Bridge Rd - Palmer Rapids - ON - Canada
Area	861 SM
Floors	1
Year Constructed	1974
Condition Assessment Date	May 16, 2023
Replacement value	$222,387.19
3 Year FCI	13.2%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Palmer Storage Shed, located at 42 Burnt Bridge Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 16, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A103001 - Slab on Grade - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	80 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$11,540.92

Description
Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible.

Condition Narrative
No major deficiencies were observed or reported. No cracking in concrete was observed.

Photos

Palmer Storage Shed - A103001


Palmer Storage Shed - A103001

Recommendations

Recommendations #1 - Slab on Grade	
Type	Life Cycle Replacement
Year	2049
Cost	$11,540.92

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	80 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$43,332.87

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely load bearing wood stud walls, supporting a truss roof deck with roof sheathing.

Condition Narrative

No major deficiencies were observed or reported on the exposed structural framing system. No significant deterioration was noted or signs to suggest any deterioration or twisting/ movement of the building structure.

Photos

Palmer Storage Shed - B103001

Palmer Storage Shed - B103001

Recommendations

Recommendations #1 - Structure	
Type	Life Cycle Replacement
Year	2049
Cost	$43,332.87

B20 Exterior Enclosure

Element Description	
Name	B201010 - Exterior Coatings/Paint - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	10 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	107 / SM
Unit Cost	$46.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,698.63

Description

A paint finish is applied to exterior wall surfaces.

Condition Narrative

Deficiencies observed or reported during the assessment include staining, fading, and discolouration. The deterioration is anticipated to progress due to age and exposure to the elements. Replacement is recommended in the short term.

Photos

Palmer Storage Shed - B201010

Palmer Storage Shed - B201010

Recommendations

Recommendations #1 - Exterior Coatings/Paint	
Type	Life Cycle Replacement
Year	2024
Cost	$6,698.63

Element Description	
Name	B201026 - Wood Siding - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	107 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$36,696.84

Description

Exterior wall surfaces include wood panel siding that is installed in a clapboard horizontally-oriented configuration.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Storage Shed - B201026

Palmer Storage Shed - B201026

Recommendations

Recommendations #1 - Wood Siding	
Type	Life Cycle Replacement
Year	2029
Cost	$36,696.84

Element Description	
Name	B203024 - Single Door - Wood - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	25 Years
Remaining Useful Life	0 Year
Renewal Year	2023
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,627.25

Description

Exterior single-door assemblies include a painted solid core wood panel set within a painted wood frame.

Condition Narrative

Deficiencies observed or reported during the assessment include delamination, wood rot, worn or discolored finishes. The deterioration is anticipated to progress due to age. Replacement is recommended in the short term.

Photos

Palmer Storage Shed - B203024

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2023
Cost	$4,627.25

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Storage Building
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	40 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	96 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$51,999.45

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

Deficiencies observed or reported during the assessment include corroded panels and missing or failed fasteners. The deterioration is anticipated to progress due to age and exposure to the elements. Replacement is recommended in the short term.

Photos

Palmer Storage Shed - B301028

Palmer Storage Shed - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2026
Cost	$51,999.45

C Interiors
C10 Interior Construction

Element Description	
Name	C102005 - Overhead Doors - Standard - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Year
Renewal Year	2023
Quantity / Unit of Measure	1 / Each
Unit Cost	$7,540.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,261.62

Description
Sectional panel overhead doors are provided on the building exterior.

Condition Narrative
Deficiencies observed or reported during the assessment include delamination, wood rot, worn or discolored finishes, water and air infiltration. The deterioration is anticipated to progress due to age. Replacement is recommended in the short term.

Photos

Palmer Storage Shed - C102005


Palmer Storage Shed - C102005

Recommendations

Recommendations #1 - Overhead Doors - Standard	
Type	Life Cycle Replacement
Year	2023
Cost	$10,261.62

C30 Interior Finishes

Element Description	
Name	C301005 - Paint Wall Covering - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	10 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	107 / SM Building
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$7,717.99

Description

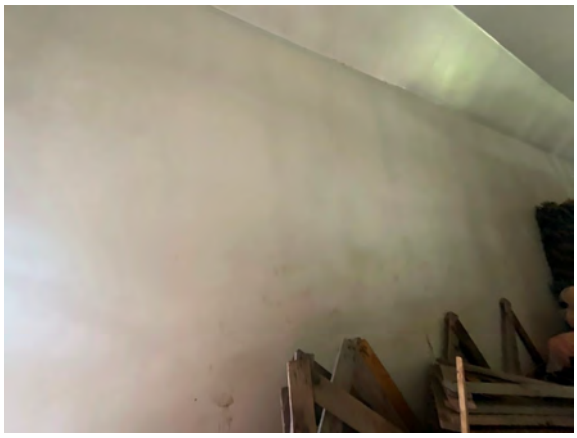
A paint finish is applied to most wall surfaces in the building.

Condition Narrative

Deficiencies observed or reported during the assessment include staining and discoloration, fading, wear, and deterioration. The deterioration is anticipated to progress due to age and ongoing building activities and may lead to a loss of marketability. Replacement is recommended in the short term.

Photos

Palmer Storage Shed - C301005



Palmer Storage Shed - C301005

Recommendations

Recommendations #1 - Paint Wall Covering	
Type	Life Cycle Replacement
Year	2024
Cost	$7,717.99

Element Description	
Name	C301022 - Wood Wall Finish - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	107 / SM
Unit Cost	$340.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$49,511.62

Description

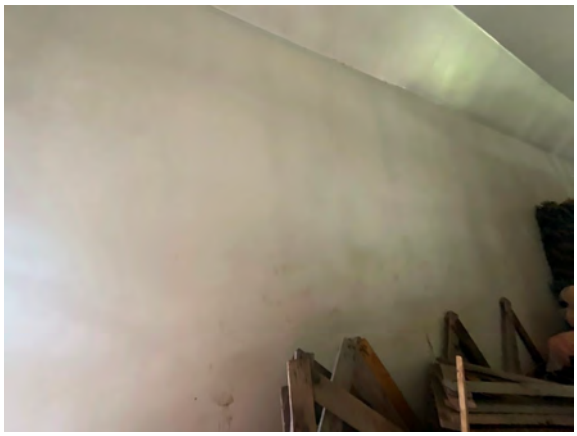
Wall surfaces are provided with a wood finish.

Condition Narrative

No significant deficiencies were observed or reported. Localized damage should be repaired as part of maintenance. Replacement is not anticipated in the short term.

Photos

Palmer Storage Shed - C301022



Palmer Storage Shed - C301022

Recommendations

Recommendations #1 - Wood Wall Finish	
Type	Life Cycle Replacement
Year	2029
Cost	$49,511.62

15 PALMER STORAGE SHED 2

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Palmer Storage Shed 2

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Palmer storage shed 2, located at 42 Burnt Bridge Rd, Palmer Rapids, ON, was reportedly constructed in 1974. The original building is a single-storey building and has a reported gross floor area of approximately 83 SM (894 SF). The building is used as a storage. The site visit was done on March 16, 2023.

Facility No	PSS2
Name	Palmer Storage Shed 2
Address	42 Burnt Bridge Rd - Palmer Rapids - ON - Canada
Area	894 SM
Floors	1
Year Constructed	1974
Condition Assessment Date	May 16, 2023
Replacement value	$164,930.29
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Palmer Storage Shed 2, located at 42 Burnt Bridge Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 16, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A103001 - Slab on Grade - Storage Building
Installation Year	1974
Condition	3 - Fair
Expected Useful Life	75 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	83 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$11,973.70

Description
Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible.

Condition Narrative
Deficiencies observed include significant lateral cracks. Although no significant elevation difference to suggest differential settlement of the concrete slab-on-grade was observed, replacement is recommended.

Photos

Palmer Storage Shed 2 - A103001


Palmer Storage Shed 2 - A103001

Recommendations

Recommendations #1 - Slab on Grade	
Type	Life Cycle Replacement
Year	2026
Cost	$11,973.70

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	83 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$44,957.85

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely load bearing wood stud walls, supporting a truss roof deck with roof sheathing.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Storage Shed 2 - B103001

Palmer Storage Shed 2 - B103001

Recommendations

Recommendations #1 - Structure	
Type	Life Cycle Replacement
Year	2049
Cost	$44,957.85

B20 Exterior Enclosure

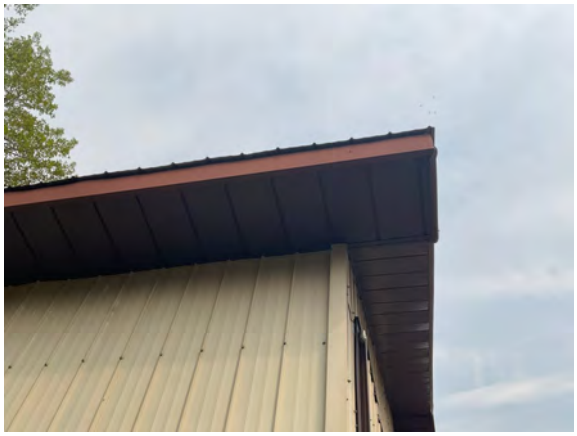
Element Description	
Name	B201008 - Exterior Soffits - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	10 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,891.73

Description
Exterior soffits are covered with perforated metal panels.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Storage Shed 2 - B201008


Palmer Storage Shed 2 - B201008

Recommendations

Recommendations #1 - Exterior Soffits	
Type	Life Cycle Replacement
Year	2029
Cost	$1,891.73

Element Description	
Name	B201024 - Metal Cladding - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	110 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$30,090.76

Description

Exterior wall surfaces include metal siding panels.

Condition Narrative

No significant deficiencies were observed or reported. Minor ice and impact damage was observed. Replacement is not anticipated in the short term.

Photos

Palmer Storage Shed 2 - B201099

Palmer Storage Shed 2 - B201099

Recommendations

Recommendations #1 - Metal Cladding	
Type	Life Cycle Replacement
Year	2029
Cost	$30,090.76

Element Description	
Name	B203024 - Single Door - Wood - Storage Building
Installation Year	2000
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,627.25

Description

Exterior single-door assemblies include a painted metal clad solid core wood panel set within painted a wood frame.

Condition Narrative

No significant deficiencies were observed or reported.

Photos

Palmer Storage Shed 2 - C102021

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2040
Cost	$4,627.25

Element Description	
Name	B203027 - Double Door - Wood - Storage Building
Installation Year	2000
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$6,270.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$17,066.40

Description

Exterior double-door assemblies include painted wood panels that are set within painted wood frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Storage Shed 2 - C102024

Recommendations

Recommendations #1 - Double Door - Wood	
Type	Life Cycle Replacement
Year	2029
Cost	$17,066.40

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	100 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$54,166.09

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Palmer Storage Shed 2 - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2029
Cost	$54,166.09

D Services
D50 Electrical

Element Description	
Name	D502029 - Incandescent Light Fixtures - Storage Building
Installation Year	2000
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	1 / Each
Unit Cost	$115.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$156.51

Description

The building's interior lighting consists of an Incandescent light fixture.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with reliability likely diminishing over time. Replacement is recommended.

Photos

Palmer Storage Shed 2 - D502002

Recommendations

Recommendations #1 - Incandescent Light Fixtures	
Type	Life Cycle Replacement
Year	2026
Cost	$156.51

16 QUADVILLE FIRE HALL #3

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Quadville Fire Hall #3

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Quadville Fire Hall #3 building, located at 3400 Quadville Rd., Palmer Rapids, ON, was reportedly constructed in 1990. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 140 SM (1500 SF). The Building Assessment was undertaken on May 18, 2023.

Facility No	QFH
Name	Quadville Fire Hall #3
Address	3400 Quadeville Rd - Palmer Rapids - ON - Canada
Area	1500 SM
Floors	1
Year Constructed	1990
Condition Assessment Date	April 06, 2023
Replacement value	$904,329.86
3 Year FCI	4.6%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Quadville Fire Hall #3, located at 3400 Quadeville Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on April 06, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A101001 - Standard Foundations - Firehall (Township)
Installation Year	1990
Condition	4 - Poor
Expected Useful Life	75 Years
Remaining Useful Life	41 Years
Renewal Year	2065
Quantity / Unit of Measure	50 / LM Footprint
Unit Cost	$1,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$99,348.91

Description
Based on the information gathered during the assessment, the foundations are standard shallow foundations bearing on good native soil. Due to the hidden nature of the building's foundations, a visual site confirmation of the foundation type was not possible.

Condition Narrative
Deficiencies observed or reported at the time of the assessment include numerous vertical cracks. A study to determine the cause and extent of the cracks with a major repair based on the outcome of the study is recommended.

Photos

Quadville Fire Hall #3 - A101001


Quadville Fire Hall #3 - A101001

Quadville Fire Hall #3 - A101001

Quadville Fire Hall #3 - A101001

Recommendations

Recommendations #1 - Standard Foundations	
Type	Engineering Study
Year	2023
Cost	$10,000.00

Recommendations #2 - Standard Foundations	
Type	Major Repair
Year	2024
Cost	$30,000.00

Element Description	
Name	A103001 - Slab on Grade - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	41 Years
Renewal Year	2065
Quantity / Unit of Measure	140 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$20,196.41

Description

Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel.

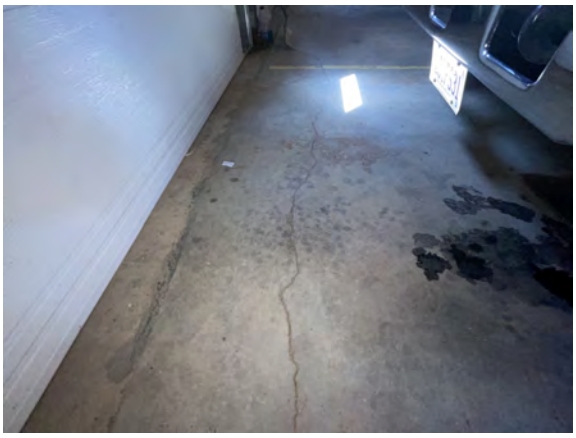
Condition Narrative

Some minor isolated cracking was observed, no significant elevation difference to suggest differential settlement of the concrete slab-on-grade was noted. However, the cracks are recommended to be monitored and should a significant magnitude change be noted, a professional/experienced structural engineer be retained.

Photos

Quadville Fire Hall #3 - A103001

Quadville Fire Hall #3 - A103001



Quadville Fire Hall #3 - A103001

B Shell
B10 Superstructure

Element Description	
Name	B102004 - Canopy - Firehall (Township)
Installation Year	1990
Condition	4 - Poor
Expected Useful Life	50 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	4 / SM
Unit Cost	$43.78
Difficulty / Regional / Soft Cost / Replacement	10.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,383.29

Description

The building exterior includes a canopy structure consisting of a wood-framed canopy with likely a metal roof. The canopy is supported on wood columns on grade.

Condition Narrative

Deterioration in the form of wood rot and wood split was noted on the guards. The observed deterioration is anticipated to progress. Replacement is recommended.

Photos

Quadville Fire Hall #3 - F101099

Quadville Fire Hall #3 - F101099

Quadville Fire Hall #3 - F101099

Recommendations

Recommendations #1 - Canopy	
Type	Life Cycle Replacement
Year	2024
Cost	$2,383.29

Element Description	
Name	B103001 - Structure - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	41 Years
Renewal Year	2065
Quantity / Unit of Measure	140 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$75,831.80

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building overall structure consists wood stud load-bearing walls, wood beams and joists supporting a wood floor deck and a sloped wood roof deck.

Condition Narrative

No siginificant deficiencies were observed or reported on the exposed structural framing system.

Photos

Quadville Fire Hall #3 - B103001

Quadville Fire Hall #3 - B103001

Quadville Fire Hall #3 - B103001

B20 Exterior Enclosure

Element Description	
Name	B201005 - Louvers and Screens - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	2 / SM
Unit Cost	$880.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,395.26

Description

Fixed metal louvers are provided at exterior wall openings, for ventilation purposes.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - B201005

Quadville Fire Hall #3 - B201005

Recommendations

Recommendations #1 - Louvers and Screens	
Type	Life Cycle Replacement
Year	2040
Cost	$2,395.26

Element Description	
Name	B201008 - Exterior Soffits - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	50 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,458.56

Description

Exterior soffits are covered with perforated, prefinished aluminum panels.

Condition Narrative

No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - B201008

Quadville Fire Hall #3 - B201008

Recommendations

Recommendations #1 - Exterior Soffits	
Type	Life Cycle Replacement
Year	2040
Cost	$9,458.56

Element Description	
Name	B201025 - Vinyl Siding - Firehall (Township)
Installation Year	1990
Condition	3 - Fair
Expected Useful Life	25 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	200 / SM
Unit Cost	$107.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$29,124.20

Description

Exterior wall surfaces are clad with vinyl siding.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged siding, staining, fading, and gaps in material coverage. The deterioration is anticipated to progress due to age and exposure to the elements Replacement is recommended in the short term.

Photos

Quadville Fire Hall #3 - B201025

Quadville Fire Hall #3 - B201025

Quadville Fire Hall #3 - B201025

Quadville Fire Hall #3 - B201025

Recommendations

Recommendations #1 - Vinyl Siding	
Type	Life Cycle Replacement
Year	2026
Cost	$29,124.20

Element Description	
Name	B202001 - Windows - Firehall (Township)
Installation Year	1990
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	14 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,863.86

Description

Exterior windows are insulated glazing units set in fixed frames with operable sashes.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, has surpassed its expected useful life and may experience sealant failure over time, resulting in potential leakage, condensation, energy loss, and discomfort for building occupants. Replacement is recommended in the short term.

Photos

Quadville Fire Hall #3 - B202001

Quadville Fire Hall #3 - B202001

Quadville Fire Hall #3 - B202001

Quadville Fire Hall #3 - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2026
Cost	$22,863.86

Element Description	
Name	B203022 - Overhead Doors - Industrial - Firehall (Township)
Installation Year	2020
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	2 / Each
Unit Cost	$15,070.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$41,018.85

Description

Sectional panel overhead doors are provided on the building exterior.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - B203022

Quadville Fire Hall #3 - B203022

Quadville Fire Hall #3 - B203022

Quadville Fire Hall #3 - B203022

Recommendations

Recommendations #1 - Overhead Doors - Industrial	
Type	Life Cycle Replacement
Year	2045
Cost	$41,018.85

Element Description	
Name	B203023 - Single Door - Hollow Metal - Firehall (Township)
Installation Year	1990
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,470.99

Description

Exterior single-door assemblies include a steel panel that is set within a painted wood frame.

Condition Narrative

Deficiencies observed or reported include damaged and worn door panel and door frame, and worn hardware. Replacement is recommended in the short term.

Photos

Quadville Fire Hall #3 - C102021

Quadville Fire Hall #3 - C102021

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2024
Cost	$5,470.99

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	168 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$90,998.16

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - B301028

Quadville Fire Hall #3 - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2030
Cost	$90,998.16

C Interiors
C10 Interior Construction

Element Description	
Name	C101001 - Fixed Partitions - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	41 Years
Renewal Year	2065
Quantity / Unit of Measure	140 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$26,865.03

Description
Interior fixed partitions include wood stud walls and gypsum board.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - C101001


Quadville Fire Hall #3 - C101001

Element Description	
Name	C102022 - Single Door - Wood - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	2 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,859.16

Description

Interior single-door assemblies include wood panels that are set within wood frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - C102022

Quadville Fire Hall #3 - C102022

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2030
Cost	$6,859.16

C20 Stairs

Element Description	
Name	C201001 - Interior Stair Construction - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	41 Years
Renewal Year	2065
Quantity / Unit of Measure	16 / Per Riser
Unit Cost	$1,140.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$24,823.62

Description

Interior wood stairs provide access between floor levels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - C201001

Quadville Fire Hall #3 - C201001

Quadville Fire Hall #3 - C201001

C30 Interior Finishes

Element Description	
Name	C302007 - Painted / Sealed Floor - Firehall (Township)
Installation Year	1990
Condition	3 - Fair
Expected Useful Life	15 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	140 / SM
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,098.20

Description

A painted/sealed floor is applied in the garage area.

Condition Narrative

Deficiencies observed or reported during the assessment include stained, worn and peeling paint. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Quadville Fire Hall #3 - C302007

Quadville Fire Hall #3 - C302007

Quadville Fire Hall #3 - C302007

Recommendations

Recommendations #1 - Painted / Sealed Floor	
Type	Life Cycle Replacement
Year	2026
Cost	$10,098.20

Element Description	
Name	C302023 - Vinyl Sheet Floor - Firehall (Township)
Installation Year	1990
Condition	3 - Fair
Expected Useful Life	15 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	4 / SM
Unit Cost	$158.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$860.12

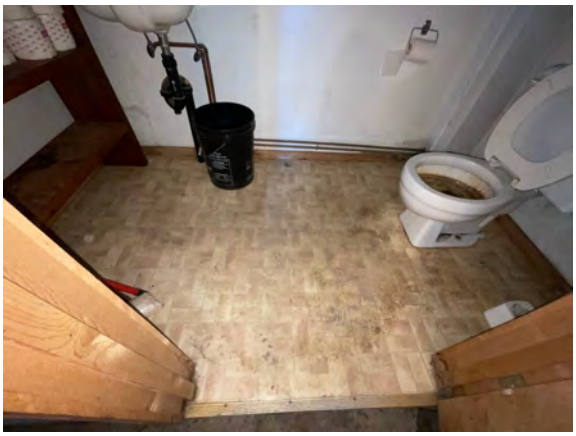
Description

A vinyl sheet floor is applied in the washroom.

Condition Narrative

Deficiencies observed or reported during the assessment include worn surfaces. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos



Quadville Fire Hall #3 - C302023

Recommendations

Recommendations #1 - Vinyl Sheet Floor	
Type	Life Cycle Replacement
Year	2026
Cost	$860.12

Element Description	
Name	C303006 - Painted Ceiling Structures - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	140 / SM
Unit Cost	$38.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$7,240.22

Description

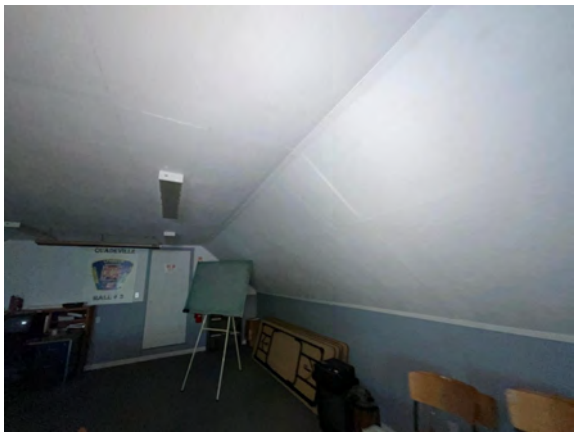
A paint application is provided on gypsum board ceilings.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - C303006



Quadville Fire Hall #3 - C303006

Recommendations

Recommendations #1 - Painted Ceiling Structures	
Type	Life Cycle Replacement
Year	2029
Cost	$7,240.22

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Firehall (Township)
Installation Year	1990
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

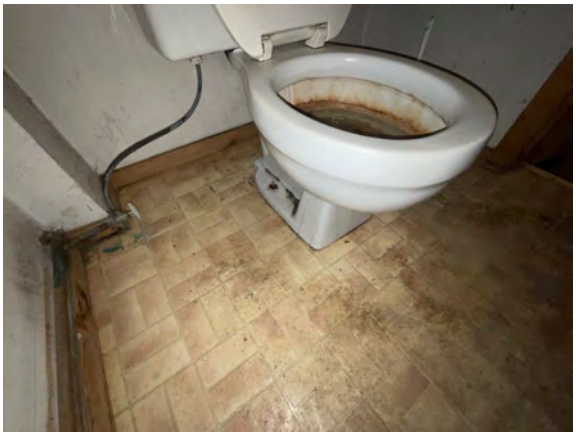
Description

The plumbing fixtures include a floor-mounted vitreous china water closet. The water closet is equipped with a manual flush device.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include stains. Replacement is recommended in the short term.

Photos



Quadville Fire Hall #3 - D201001

Quadville Fire Hall #3 - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2024
Cost	$1,633.13

Element Description	
Name	D201003 - Lavatories - Firehall (Township)
Installation Year	1990
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

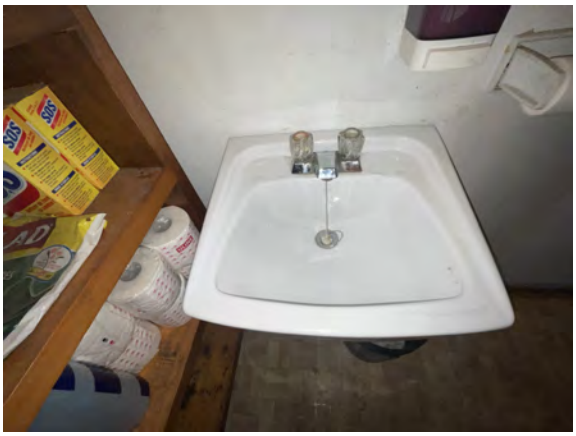
Description

The plumbing fixtures include a vitreous china lavatory. The lavatory is equipped with a manual tap set.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include leaking and energy-inefficient tap sets. Replacement is recommended in the short term.

Photos



Quadville Fire Hall #3 - D201003

Recommendations

Recommendations #1 - Lavatories	
Type	Life Cycle Replacement
Year	2024
Cost	$1,633.13

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	140 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,431.93

Description

The building domestic water distribution, where visible, consists of cold and hot water copper pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D202001

Quadville Fire Hall #3 - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2040
Cost	$11,431.93

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	140 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,431.93

Description

The building sanitary waste drainage, where visible, consists of rigid plastic pipe drain lines and risers. The drainage includes vents, traps, and floor drains. The sanitary waste drainage connects to the site septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2040
Cost	$11,431.93

Element Description	
Name	D209006 - Air Compressors and Air Dryers - Firehall (Township)
Installation Year	2014
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$8,800.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,976.31

Description

The compressed air distribution includes a Reciprocating air compressor system. The system is manufactured by Ingersoll Rand and is located in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D209006

Quadville Fire Hall #3 - D209006

Recommendations

Recommendations #1 - Air Compressors and Air Dryers	
Type	Life Cycle Replacement
Year	2029
Cost	$11,976.31

D30 HVAC

Element Description	
Name	D301012 - Fuel Supply Storage Tanks (Interior) - Firehall (Township)
Installation Year	2014
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	30 Years
Renewal Year	2054
Quantity / Unit of Measure	910 / L
Unit Cost	$46.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$56,969.12

Description

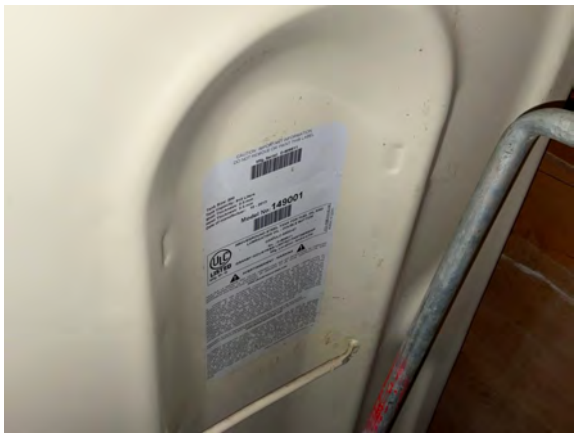
The diesel /fuel oil supply includes a horizontal. The tank manufacturing company is unknown and has a storage capacity of 910 L. The unit is located in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D301012



Quadville Fire Hall #3 - D301012

Element Description	
Name	D302003 - Fuel Fired Forced Air Furnaces - Firehall (Township)
Installation Year	2014
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	1 / MBH
Unit Cost	$66.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$89.82

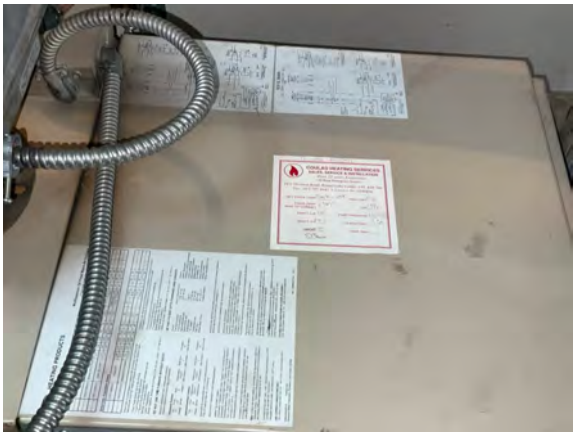
Description

Building heating consists of a natural gas-fired forced air furnace. The furnace is manufactured by Compact-Multi. The unit is located at the ceiling in the main hall.

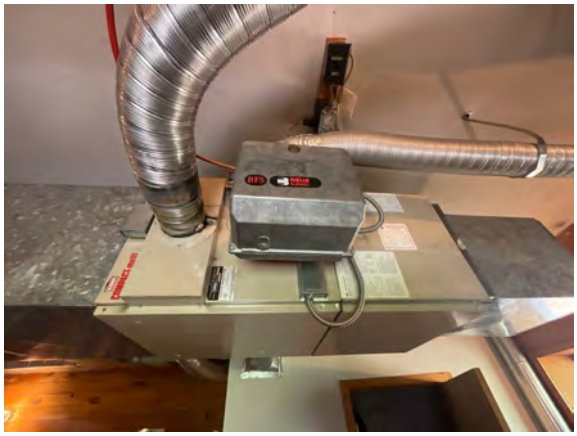
Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Quadville Fire Hall #3 - D302003



Quadville Fire Hall #3 - D302003

Recommendations

Recommendations #1 - Fuel Fired Forced Air Furnaces	
Type	Life Cycle Replacement
Year	2032
Cost	$89.82

Element Description	
Name	D304001 - Air Distribution Systems - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	140 / SM Building
Unit Cost	$178.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$33,914.72

Description

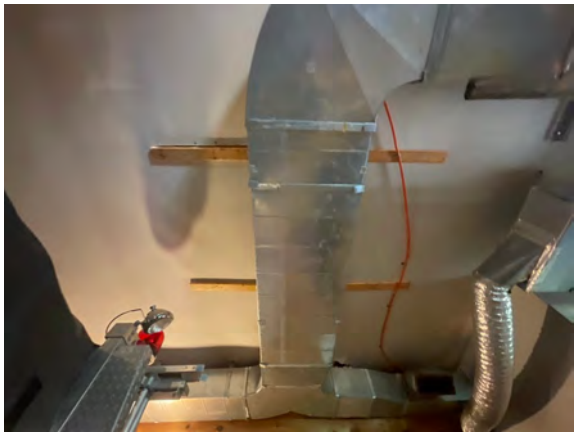
The air distribution in the vehicle bay, where visible, consists of a network of galvanized sheet metal supply, return and exhaust air ductwork. The distribution includes dampers and diffusers.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D304001



Quadville Fire Hall #3 - D304001

Recommendations

Recommendations #1 - Air Distribution Systems	
Type	Life Cycle Replacement
Year	2040
Cost	$33,914.72

Element Description	
Name	D304033 - Exhaust Fans - Residential - Firehall (Township)
Installation Year	2014
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	15 Years
Renewal Year	2039
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,150.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,565.09

Description

Building ventilation includes exhaust fans for ventilation in the washroom.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D304033

Recommendations

Recommendations #1 - Exhaust Fans - Residential	
Type	Life Cycle Replacement
Year	2039
Cost	$1,565.09

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Firehall (Township)
Installation Year	2017
Condition	3 - Fair
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$702.25

Description

ABC Type Fire Extinguishers are located in the common area space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D403002

Quadville Fire Hall #3 - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$702.25

D50 Electrical

Element Description	
Name	D501005 - Panelboards up to 400A - Firehall (Township)
Installation Year	2014
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	30 Years
Renewal Year	2054
Quantity / Unit of Measure	1 / Each
Unit Cost	$6,280.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,546.73

Description

The electrical service includes a panelboard rated 125 A at 120/240V and located in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. It should be noted that the blue circuit breakers are known to fail to trip and should be replaced

Photos

Quadville Fire Hall #3 - D501025

Recommendations

Recommendations #1 - Panelboards up to 400A	
Type	Major Repair
Year	2023
Cost	$500.00

Element Description	
Name	D501024 - Main Service Panels - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	1 / Each
Unit Cost	$16,330.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,224.22

Description

The electrical service includes a main service switchboard identified as the main service disconnect. The switchboard is rated 800 A at 600V and is located in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D501003

Recommendations

Recommendations #1 - Main Service Panels	
Type	Life Cycle Replacement
Year	2030
Cost	$22,224.22

Element Description	
Name	D502011 - Branch Wiring and Devices - Residential - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	140 / SM
Unit Cost	$64.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$12,194.06

Description

The building branch wiring consists of non-metallic sheathed copper wire. The wiring includes junction boxes, devices, switches and receptacles.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D502001

Quadville Fire Hall #3 - D502001

Quadville Fire Hall #3 - D502001

Quadville Fire Hall #3 - D502001

Recommendations

Recommendations #1 - Branch Wiring and Devices - Residential	
Type	Life Cycle Replacement
Year	2040
Cost	$12,194.06

Element Description	
Name	D502021 - Interior Lighting Residential - Firehall (Township)
Installation Year	1990
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	140 / SM
Unit Cost	$35.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,668.63

Description

The building interior lighting consists of Incandescent light bulbs in the main hall.

Condition Narrative

No significant deficiencies were observed or reported. However, the lighting is energy inefficient. Replacement or upgrade to LED is recommended in the short term /should be considered.

Photos

Quadville Fire Hall #3 - D502002

Quadville Fire Hall #3 - D502002

Recommendations

Recommendations #1 - Interior Lighting Residential	
Type	Life Cycle Replacement
Year	2026
Cost	$6,668.63

Element Description	
Name	D502041 - Exterior Lighting - Firehall (Township)
Installation Year	2015
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	2 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,562.36

Description

The building exterior lighting consists of wall-pack mounted fixtures along the perimeter of the building and canopy pot light fixtures at entrances. The wall fixtures are LED.

Condition Narrative

No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - D502041

Quadville Fire Hall #3 - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2035
Cost	$1,562.36

G Building Sitework
G20 Site Improvements

Element Description	
Name	G204080 - Message Sign - Post-Mounted - Firehall (Township)
Installation Year	2010
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,950.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,653.84

Description
Message signs include a forest fire hazard sign.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Quadville Fire Hall #3 - G204080

Recommendations

Recommendations #1 - Message Sign - Post-Mounted	
Type	Life Cycle Replacement
Year	2029
Cost	$2,653.84

Element Description	
Name	G204081 - Message Sign - Wall-Mounted - Firehall (Township)
Installation Year	2017
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	13 Years
Renewal Year	2037
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,500.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,041.42

Description

Message signs consist of a main building identification sign.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - G204082

Recommendations

Recommendations #1 - Message Sign - Wall-Mounted	
Type	Life Cycle Replacement
Year	2029
Cost	$2,041.42

G30 Site Mechanical Utilities

Element Description	
Name	G301001 - Well Systems - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	1 / Each
Unit Cost	$127,770.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$173,887.81

Description

The site includes a drilled well for water supply from an aquifer. The well is assumed to consist of a metal casing with a well screen and drop pipe for the submersible /pumphouse pump.

Condition Narrative

The well is concealed below ground and cannot be fully assessed via visual means. However, no significant deficiencies were reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - G301001

Recommendations

Recommendations #1 - Well Systems	
Type	Life Cycle Replacement
Year	2040
Cost	$173,887.81

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,198.71

Description

The building site includes a septic system comprising an underground concrete septic tank presumably connected to a drain field.

Condition Narrative

No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Recommendations

Recommendations #1 - Septic Tank - 4000 Gallons	
Type	Life Cycle Replacement
Year	2040
Cost	$51,198.71

G40 Site Electrical Utilities

Element Description	
Name	G401010 - Electrical Service Single Phase - Firehall (Township)
Installation Year	1990
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	40 / LM
Unit Cost	$297.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$16,168.01

Description

The overhead/underground electrical service is assumed to be equivalent to 200A 3 wire single phase from the utility to the building electrical service equipment.

Condition Narrative

No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Fire Hall #3 - G401010

Quadville Fire Hall #3 - G401010

Recommendations

Recommendations #1 - Electrical Service Single Phase	
Type	Life Cycle Replacement
Year	2040
Cost	$16,168.01

17 QUADVILLE PUBLIC WORKS GARAGE

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Quadville Public Works Garage

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Quadeville Public Works Garage, located at 3310 Quadeville Rd.3310 Quadeville Rd., Palmer Rapids, ON, was reportedly constructed in 1970. The building is a single-storey building without a basement with a reported gross floor area of approximately 320 SM (3450 SF). The building is used as a maintenance workshop and garage. The site visit was done on May 18, 2023.

Facility No	QPWG
Name	Quadville Public Works Garage
Address	3310 Quadeville Rd. - Palmer Rapids - ON - Canada
Area	3450 SM
Floors	1
Year Constructed	1970
Condition Assessment Date	April 06, 2023
Replacement value	$1,859,178.92
3 Year FCI	5.2%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Quadville Public Works Garage, located at 3310 Quadeville Rd. - Palmer Rapids - ON - Canada.

The site visit was undertaken on April 06, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A101001 - Standard Foundations - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	75 / LM Footprint
Unit Cost	$1,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$149,023.37

Description
Based on the information gathered during the assessment, the foundations are standard deep foundations bearing on good native soil. Due to the hidden nature of the building's foundations, a visual site confirmation of the foundation type was not possible.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Recommendations

Recommendations #1 - Standard Foundations	
Type	Life Cycle Replacement
Year	2045
Cost	$149,023.37

Element Description	
Name	A103001 - Slab on Grade - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	320 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$46,163.22

Description

Based on the information gathered during the assessment, the floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible.

Condition Narrative

Some minor isolated cracking was observed, but no significant elevation difference to suggest differential settlement of the concrete slab-on-grade was noted.

Photos

Quadville Public Works Garage - A103001

Quadville Public Works Garage - A103001

Quadville Public Works Garage - A103001

Quadville Public Works Garage - A103001

Recommendations

Recommendations #1 - Slab on Grade	
Type	Life Cycle Replacement
Year	2045
Cost	$46,163.22

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	320 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$173,329.83

Description

Based on the information gathered during the assessment, the building overall structure likely consists of concrete masonry unit (CMU) walls and metal beams supporting a suspended wood joist floor and wood truss roof with roof sheathing.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - B103001

Quadville Public Works Garage - B103001

Recommendations

Recommendations #1 - Structure	
Type	Life Cycle Replacement
Year	2045
Cost	$173,329.83

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	75 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$14,187.84

Description
Exterior soffits are covered with perforated, vinyl panels.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Quadville Public Works Garage - B201008

Recommendations

Recommendations #1 - Exterior Soffits	
Type	Life Cycle Replacement
Year	2029
Cost	$14,187.84

Element Description	
Name	B201021 - Masonry - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	375 / SM
Unit Cost	$754.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$384,806.92

Description

Exterior wall surfaces include mortar-set masonry.

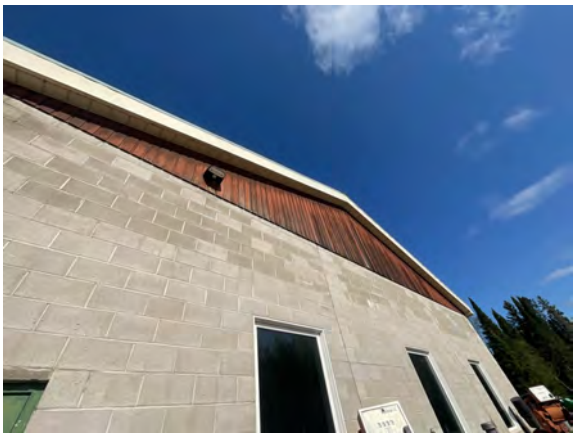
Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - B201021

Quadville Public Works Garage - B201021



Quadville Public Works Garage - B201021

Recommendations

Recommendations #1 - Masonry	
Type	Life Cycle Replacement
Year	2045
Cost	$384,806.92

Element Description	
Name	B201024 - Metal Cladding - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	50 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$13,677.49

Description

Exterior wall surfaces include prefinished metal siding panels.

Condition Narrative

No significant deficiencies were observed or reported. Impact damage should be repaired as part of maintenance. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - B201024

Quadville Public Works Garage - B201024

Quadville Public Works Garage - B201024

Recommendations

Recommendations #1 - Metal Cladding	
Type	Life Cycle Replacement
Year	2029
Cost	$13,677.49

Element Description	
Name	B201026 - Wood Siding - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	8 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,743.66

Description

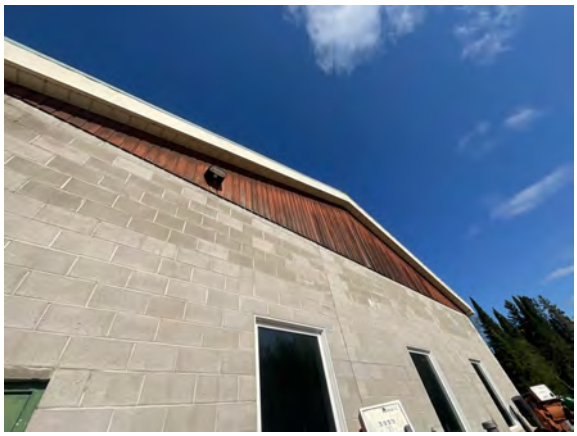
Exterior wall surfaces are clad with wood siding.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged surfaces, delamination, deformation, loose connections, loose components, staining, fading, and gaps in material coverage. The deterioration is anticipated to progress due to age and exposure to the elements and may lead to moisture infiltration, a weakening of integrity, and a loss of marketability. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - B201026



Quadville Public Works Garage - B201026

Quadville Public Works Garage - B201026

Recommendations

Recommendations #1 - Wood Siding	
Type	Life Cycle Replacement
Year	2024
Cost	$2,743.66

Element Description	
Name	B202001 - Windows - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	20 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$32,662.66

Description

Exterior windows are insulated glazing units set in operable frames.

Condition Narrative

Deficiencies observed at the time of the assessment include failed window seals. The system, based on age, has surpassed its expected useful life and may experience sealant failure over time, resulting in potential leakage, condensation, energy loss, and discomfort for building occupants. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - B202001

Quadville Public Works Garage - B202001

Quadville Public Works Garage - B202001

Quadville Public Works Garage - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2024
Cost	$32,662.66

Element Description	
Name	B203022 - Overhead Doors - Industrial - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	4 / Each
Unit Cost	$15,070.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$82,037.70

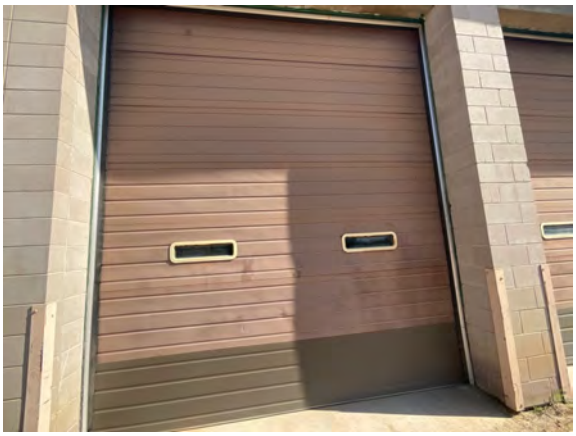
Description

Sectional panel overhead doors are provided on the building exterior.

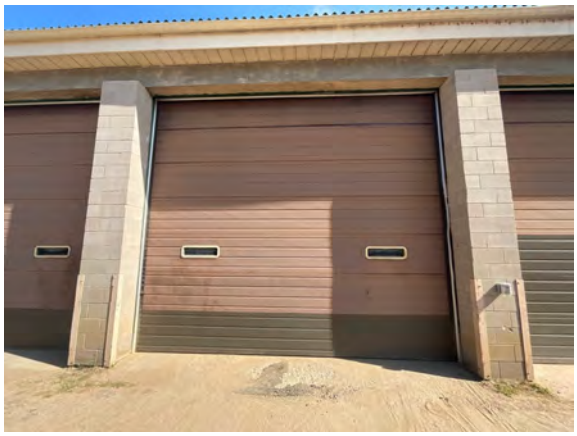
Condition Narrative

No significant deficiencies were observed or reported. The doors appear to have been repaired over time. Replacement is not anticipated in the short term.

Photos

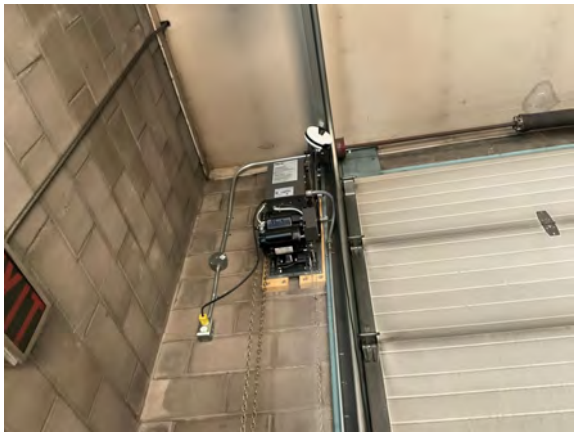


Quadville Public Works Garage - B203022



Quadville Public Works Garage - B203022

Quadville Public Works Garage - B203022



Quadville Public Works Garage - B203022

Recommendations

Recommendations #1 - Overhead Doors - Industrial	
Type	Life Cycle Replacement
Year	2029
Cost	$82,037.70

Element Description	
Name	B203023 - Single Door - Hollow Metal - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	2 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,941.99

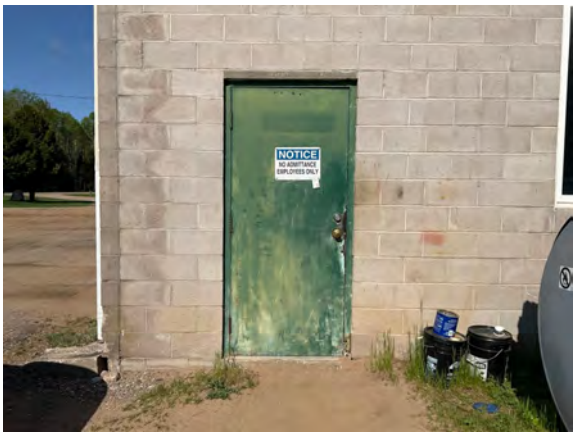
Description

Exterior single-door assemblies include painted steel panels that are set within painted steel frames.

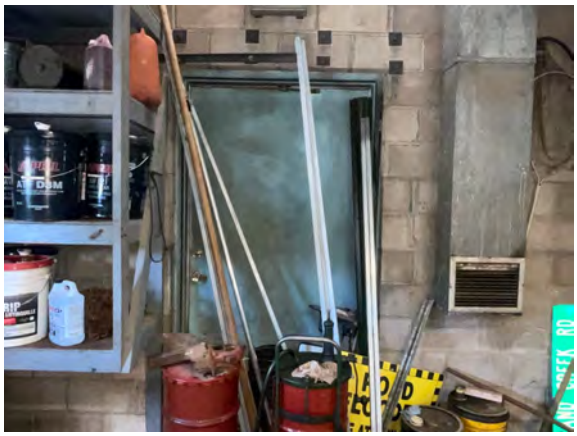
Condition Narrative

Deficiencies observed at the time of the assessment include damaged and worn door panel, worn paint and worn hardware. Replacement is recommended in the short term.

Photos



Quadville Public Works Garage - B203023



Quadville Public Works Garage - B203023

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2024
Cost	$10,941.99

B30 Roofing

Element Description	
Name	B301005 - Gutters and Downspouts - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	24 / LM
Unit Cost	$57.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,861.77

Description

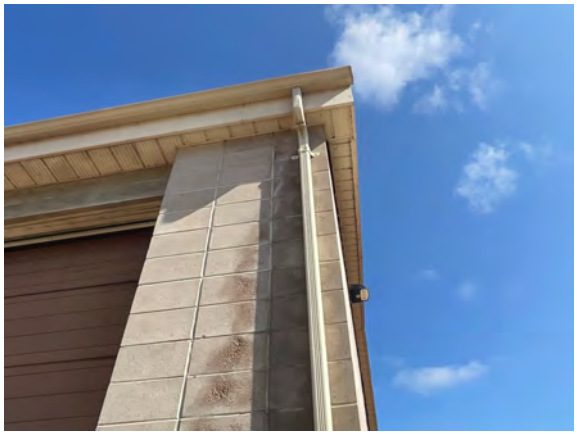
Gutters and downspouts are installed for the collection of stormwater runoff. The downspouts discharge onto paved or landscaped surfaces at ground level.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Quadville Public Works Garage - B301005



Quadville Public Works Garage - B301005

Recommendations

Recommendations #1 - Gutters and Downspouts	
Type	Life Cycle Replacement
Year	2029
Cost	$1,861.77

Element Description	
Name	B301028 - Metal Roofing - Workshop
Installation Year	1970
Condition	3 - Fair
Expected Useful Life	40 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	384 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$207,995.79

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. However isolated areas of ceiling water stains suggest past roof leaks. The system, based on age may experience weakening of integrity over time, resulting in further moisture infiltration, damage to internal elements, and disruption to building operations. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - B301028

Quadville Public Works Garage - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2026
Cost	$207,995.79

C Interiors
C10 Interior Construction

Element Description	
Name	C101001 - Fixed Partitions - Workshop
Installation Year	1987
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	45 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,635.19

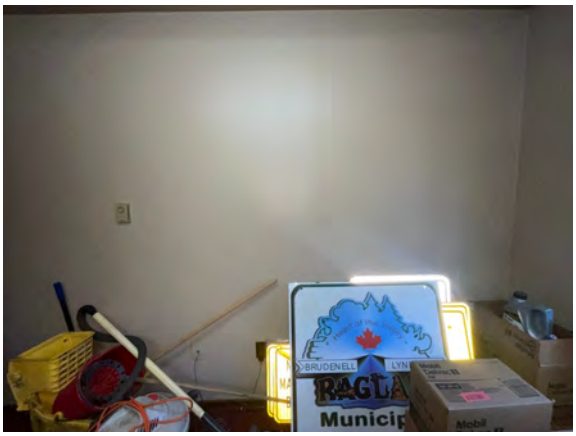
Description

Interior fixed partitions include concrete masonry unit (CMU) walls. The partition walls also support a wood framed mezzanine floor.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Quadville Public Works Garage - C101001

Quadville Public Works Garage - C101001

Element Description	
Name	C101005 - Interior Windows - Workshop
Installation Year	1970
Condition	3 - Fair
Expected Useful Life	75 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	6 / SM
Unit Cost	$754.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,156.91

Description

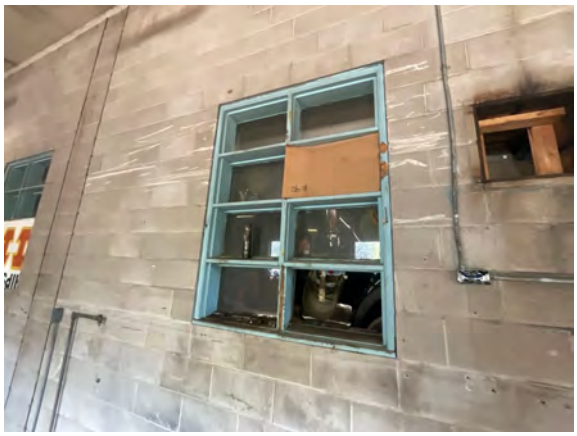
Interior windows include glass panels set in fixed frames.

Condition Narrative

Deficiencies observed or reported during the assessment include missing glazing, degraded sealant. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - C101005



Quadville Public Works Garage - C101005

Quadville Public Works Garage - C101005

Recommendations

Recommendations #1 - Interior Windows	
Type	Life Cycle Replacement
Year	2026
Cost	$6,156.91

Element Description	
Name	C102022 - Single Door - Wood - Workshop
Installation Year	2000
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	1 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,429.58

Description

Exterior swing-type single-door assemblies include a painted wood panel hinge-mounted within a painted wood frame. The door includes a vision lite.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - C102021

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2040
Cost	$3,429.58

Element Description	
Name	C102022 - Single Door - Wood - Workshop
Installation Year	2000
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	16 Years
Renewal Year	2040
Quantity / Unit of Measure	6 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$20,577.47

Description

Interior single-door assemblies include wood panels that are set within steel frames.

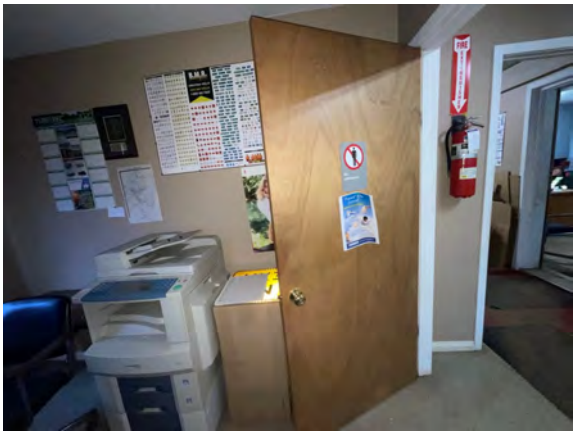
Condition Narrative

No significant deficiencies were observed or reported. However, one door needs to be replaced. Replacement is recommended. Assuming the recommended replacement will be undertaken, replacement of the system is not anticipated in the short term.

Photos

Quadville Public Works Garage - C102022

Quadville Public Works Garage - C102022



Quadville Public Works Garage - C102022

Quadville Public Works Garage - C102022

Quadville Public Works Garage - C102022

Quadville Public Works Garage - C102022

Recommendations

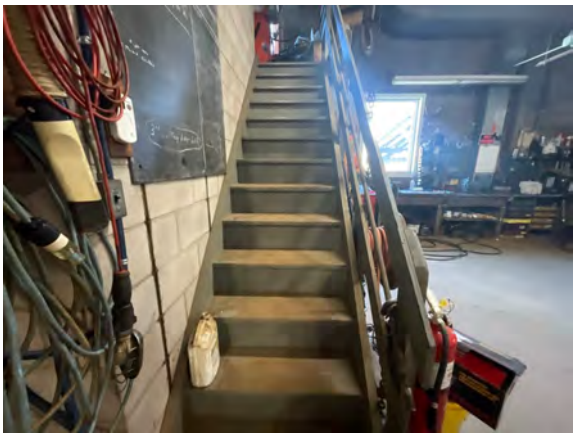
Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2040
Cost	$20,577.47

C20 Stairs

Element Description	
Name	C201001 - Interior Stair Construction - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	14 / Per Riser
Unit Cost	$1,140.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$21,720.67

Description
Interior wood stairs provide access between floor levels.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos


Quadville Public Works Garage - C201001

Recommendations

Recommendations #1 - Interior Stair Construction	
Type	Life Cycle Replacement
Year	2045
Cost	$21,720.67

C30 Interior Finishes

Element Description	
Name	C301005 - Paint Wall Covering - Workshop
Installation Year	2000
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	30 / SM Building
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,163.90

Description

A paint finish is applied to wall surfaces in the office area.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - C301005

Quadville Public Works Garage - C301005

Recommendations

Recommendations #1 - Paint Wall Covering	
Type	Life Cycle Replacement
Year	2029
Cost	$2,163.90

Element Description	
Name	C302005 - Carpet Floor - Workshop
Installation Year	2000
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	10 / SM
Unit Cost	$114.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,551.48

Description

A carpet floor is applied in the office area.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - C302005

Quadville Public Works Garage - C302005

Recommendations

Recommendations #1 - Carpet Floor	
Type	Life Cycle Replacement
Year	2029
Cost	$1,551.48

Element Description	
Name	C302007 - Painted / Sealed Floor - Workshop
Installation Year	2000
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	320 / SM
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$23,081.61

Description

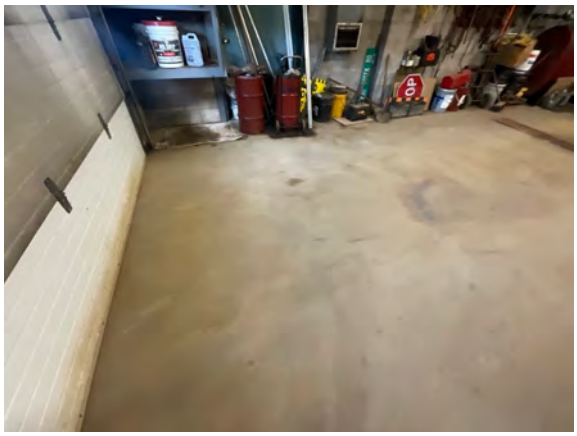
A painted/sealed floor is applied in the garage area.

Condition Narrative

No significant deficiencies were observed or reported. Some stains were observed and should be treated as part of maintenance. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - C302007



Quadville Public Works Garage - C302007

Recommendations

Recommendations #1 - Painted / Sealed Floor	
Type	Life Cycle Replacement
Year	2029
Cost	$23,081.61

Element Description	
Name	C303004 - Acoustic Tile Ceiling - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	30 / SM
Unit Cost	$88.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,077.87

Description

A fibreboard ceiling tile finish is applied in the office area.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - C303004

Recommendations

Recommendations #1 - Acoustic Tile Ceiling	
Type	Life Cycle Replacement
Year	2029
Cost	$1,077.87

Element Description	
Name	C303006 - Painted Ceiling Structures - Workshop
Installation Year	2000
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	50 / SM
Unit Cost	$38.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,585.79

Description

The interior ceiling finish includes painted gypsum board in the office area.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - C303099

Quadville Public Works Garage - C303099

Quadville Public Works Garage - C303099

Recommendations

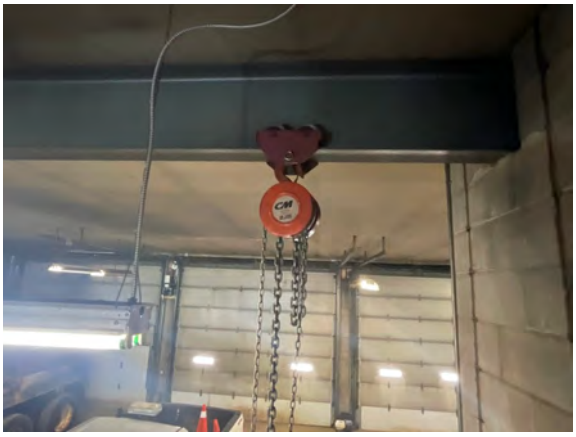
Recommendations #1 - Painted Ceiling Structures	
Type	Life Cycle Replacement
Year	2030
Cost	$2,585.79

D Services
D10 Conveying

Element Description	
Name	D109007 - Overhead Cranes - Fixed - Workshop
Installation Year	2000
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	6 Years
Renewal Year	2030
Quantity / Unit of Measure	1 / Each
Unit Cost	$9,850.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$13,405.30

Description
Conveying of equipment is provided by a single-beam overhead crane system.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - D109007


Quadville Public Works Garage - D109007

Recommendations

Recommendations #1 - Overhead Cranes - Fixed	
Type	Life Cycle Replacement
Year	2030
Cost	$13,405.30

D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,266.27

Description

The plumbing fixtures include floor-mounted vitreous china water closets. The water closets are equipped with manual flush devices.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include stains. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - D201001

Quadville Public Works Garage - D201001

Quadville Public Works Garage - D201001

Quadville Public Works Garage - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2024
Cost	$3,266.27

Element Description	
Name	D201003 - Lavatories - Workshop
Installation Year	1970
Condition	3 - Fair
Expected Useful Life	35 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,266.27

Description

The plumbing fixtures include vitreous china lavatories. The lavatories are equipped with manual tap sets.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include stains and worn tap sets. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - D201003

Quadville Public Works Garage - D201003

Recommendations

Recommendations #1 - Lavatories	
Type	Life Cycle Replacement
Year	2026
Cost	$3,266.27

Element Description	
Name	D201004 - Sinks - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,633.13

Description

The plumbing fixtures include a single-bowl stainless steel sink equipped with a manual tap set.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include stains and worn tap sets. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - D201004

Recommendations

Recommendations #1 - Sinks	
Type	Life Cycle Replacement
Year	2024
Cost	$1,633.13

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Workshop
Installation Year	1970
Condition	3 - Fair
Expected Useful Life	40 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	320 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$26,130.12

Description

The building domestic water distribution, where visible, consists of cold and hot water copper pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

No significant deficiencies were observed or reported. Some sections of piping appear to have been updated. However, the majority of the system appears to be original to building construction and due to age can experience piping fatigue over time which can result in failure. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2026
Cost	$26,130.12

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	320 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$26,130.12

Description

The building sanitary waste drainage, where visible, consists of rigid plastic pipe drain lines and risers. The drainage includes steel pipe vents, traps and floor drains. The sanitary waste drainage connects to the site's septic system.

Condition Narrative

No significant deficiencies were observed or reported. The system appears to have been updated. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - D203001

Quadville Public Works Garage - D203001

Quadville Public Works Garage - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2029
Cost	$26,130.12

Element Description	
Name	D209006 - Air Compressors and Air Dryers - Workshop
Installation Year	2000
Condition	3 - Fair
Expected Useful Life	15 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	1 / Each
Unit Cost	$8,800.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,976.31

Description

The compressed air distribution includes an air compressor and dryer system.

Condition Narrative

No significant deficiencies were observed or reported. However the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - D209006

Quadville Public Works Garage - D209006

Quadville Public Works Garage - D209006

Recommendations

Recommendations #1 - Air Compressors and Air Dryers	
Type	Life Cycle Replacement
Year	2026
Cost	$11,976.31

D30 HVAC

Element Description	
Name	D301012 - Fuel Supply Storage Tanks (Interior) - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	500 / L
Unit Cost	$46.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,390.51

Description

The building includes a bulk engine oil tank.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - D301012

Recommendations

Recommendations #1 - Fuel Supply Storage Tanks (Interior)	
Type	Life Cycle Replacement
Year	2029
Cost	$9,390.51

Element Description	
Name	D302003 - Fuel Fired Forced Air Furnaces - Workshop
Installation Year	2000
Condition	3 - Fair
Expected Useful Life	18 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	160 / MBH
Unit Cost	$66.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$14,371.57

Description

Building heating consists of oil-fired forced air furnaces. The manufacturing name and heating capacity was not available at the time of visit. The units are suspended from the ceiling.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term. The furnaces are scheduled for replacement in 2024.

Photos

Quadville Public Works Garage - D302003

Quadville Public Works Garage - D302003

Quadville Public Works Garage - D302003

Quadville Public Works Garage - D302003

Recommendations

Recommendations #1 - Fuel Fired Forced Air Furnaces	
Type	Life Cycle Replacement
Year	2023
Cost	$14,371.57

Element Description	
Name	D304001 - Air Distribution Systems - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	320 / SM Building
Unit Cost	$178.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$77,519.37

Description

The building air distribution, where visible, consists of a network of galvanized sheet metal supply, return and exhaust air ductwork. The distribution includes dampers, diffusers and grilles.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - D304001

Quadville Public Works Garage - D304001

Quadville Public Works Garage - D304001

Quadville Public Works Garage - D304001

Recommendations

Recommendations #1 - Air Distribution Systems	
Type	Life Cycle Replacement
Year	2029
Cost	$77,519.37

Element Description	
Name	D305010 - Electric Baseboard Heaters - Workshop
Installation Year	2000
Condition	4 - Poor
Expected Useful Life	18 Years
Remaining Useful Life	1 Year
Renewal Year	2025
Quantity / Unit of Measure	5 / Each
Unit Cost	$360.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,449.70

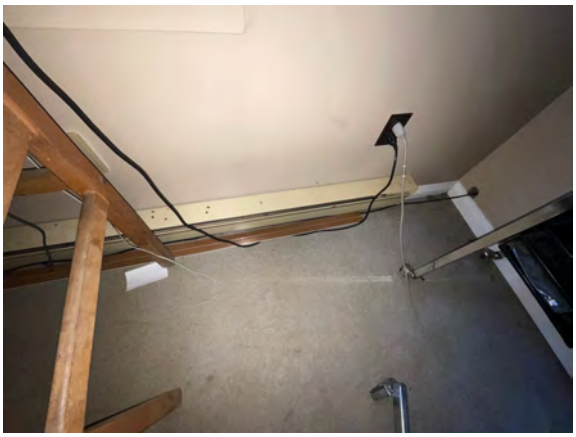
Description

The building HVAC includes perimeter electric baseboard heaters and one electric force flow heater. The units are located in the office.

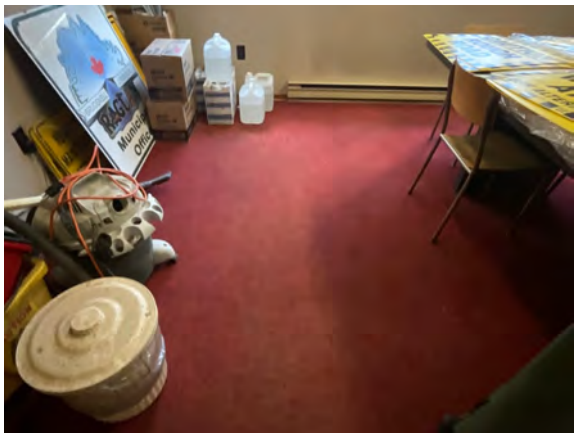
Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching or is past its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos



Quadville Public Works Garage - D305010



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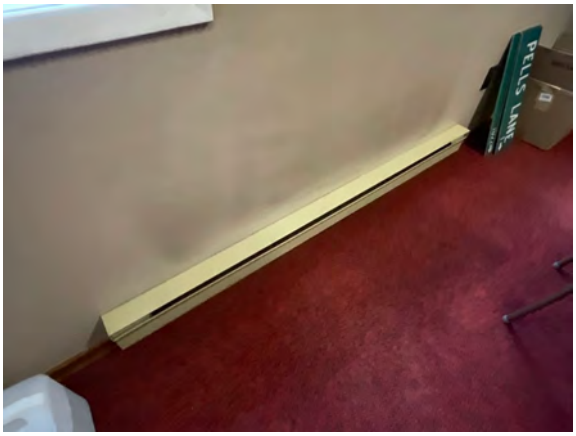


Quadville Public Works Garage - D305010

Quadville Public Works Garage - D305010

Quadville Public Works Garage - D305010

Recommendations

Recommendations #1 - Electric Baseboard Heaters	
Type	Life Cycle Replacement
Year	2025
Cost	$2,449.70

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Workshop
Installation Year	2017
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	4 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,404.49

Description

ABC Type Fire Extinguishers are located in the corridors and common area space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - D403002

Quadville Public Works Garage - D403002

Quadville Public Works Garage - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$1,404.49

D50 Electrical

Element Description	
Name	D501025 - Main Service Disconnects - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	40 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$12,560.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,093.46

Description

Electrical service to the building is directed to a main disconnect. The main disconnect has a rating of 200A at 120/240V.

Condition Narrative

No significant deficiencies were observed or reported. However, the system based on age, is approaching or is past its expected useful life and can experience electrical or thermal breakdown over time. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - D501003

Recommendations

Recommendations #1 - Main Service Disconnects	
Type	Life Cycle Replacement
Year	2024
Cost	$17,093.46

Element Description	
Name	D501031 - Electrical Distribution - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	40 Years
Remaining Useful Life	1 Year
Renewal Year	2025
Quantity / Unit of Measure	320 / SM Building
Unit Cost	$79.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$34,404.66

Description

The electrical distribution consists of switchboards, panelboards, disconnects, feeders and associated equipment. The feeders are insulated copper wire in rigid metal conduit. The distribution is fed by the main service disconnect.

Condition Narrative

No significant deficiencies were observed or reported. However, the system based on age, is approaching or is past its expected useful life and can experience electrical or thermal breakdown over time. Some circuit breakers (light blue) are known to fail to trip and are on recall. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - D501025

Quadville Public Works Garage - D501025

Quadville Public Works Garage - D501025

Quadville Public Works Garage - D501025

Quadville Public Works Garage - D501025

Recommendations

Recommendations #1 - Electrical Distribution	
Type	Life Cycle Replacement
Year	2025
Cost	$34,404.66

Element Description	
Name	D502001 - Branch Wiring and Devices - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	50 Years
Remaining Useful Life	1 Year
Renewal Year	2025
Quantity / Unit of Measure	320 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$61,405.79

Description

The building branch wiring consists of insulated copper wire in rigid metal conduit and flexible armored cable. The wiring includes junction boxes, devices, switches and receptacles.

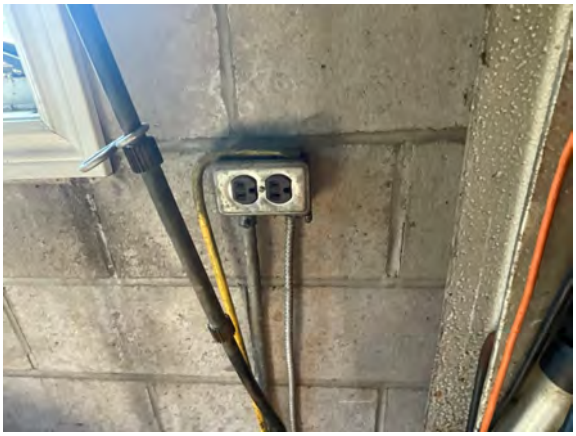
Condition Narrative

No significant deficiencies were observed or reported. Some wiring was added over time. However the system, based on age, is approaching or is past its expected useful life and can experience insulation breakdown over time. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - D502001

Quadville Public Works Garage - D502001



Quadville Public Works Garage - D502001

Quadville Public Works Garage - D502001

Quadville Public Works Garage - D502001

Recommendations

Recommendations #1 - Branch Wiring and Devices	
Type	Life Cycle Replacement
Year	2025
Cost	$61,405.79

Element Description	
Name	D502002 - Interior Lighting - Workshop
Installation Year	2000
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	11 Years
Renewal Year	2035
Quantity / Unit of Measure	320 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$48,776.23

Description

The building interior lighting consists of linear and socket fixtures. The linear fixtures appear to be T8.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. Upgrade to LED should be considered.

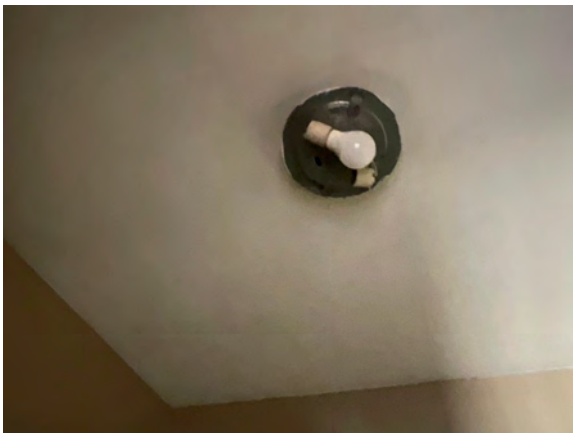
Photos

Quadville Public Works Garage - D502002

Quadville Public Works Garage - D502002

Quadville Public Works Garage - D502002

Quadville Public Works Garage - D502002



Quadville Public Works Garage - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2035
Cost	$48,776.23

Element Description	
Name	D502041 - Exterior Lighting - Workshop
Installation Year	2022
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	18 Years
Renewal Year	2042
Quantity / Unit of Measure	2 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,562.36

Description

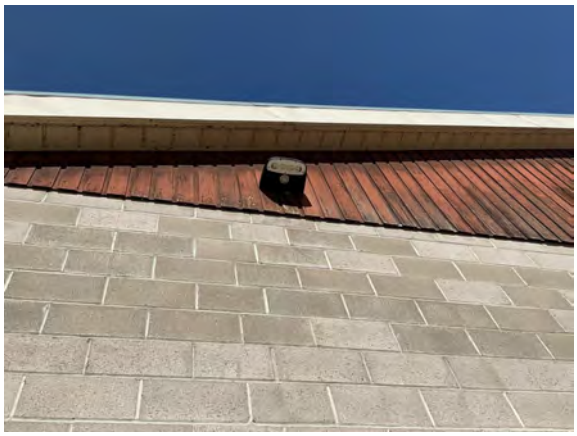
The building exterior lighting consists of surface-mounted fixtures along the perimeter of the building. The wall fixtures are LED.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - D502041



Quadville Public Works Garage - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2042
Cost	$1,562.36

Element Description	
Name	D502051 - Exit Lighting - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Year
Renewal Year	2023
Quantity / Unit of Measure	320 / SM Building
Unit Cost	$4.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,742.01

Description

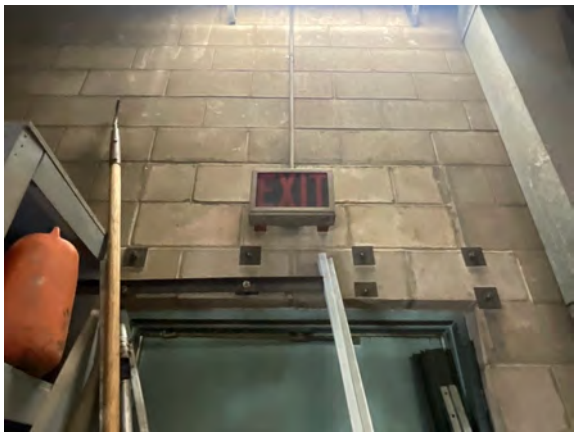
The building exit lighting consists of illuminated single-sided exit signs along egresses and at exits.

Condition Narrative

Deficiencies observed or reported at the time of the assessment include damage and poor illumination. Replacement or upgrade to pictogram exit signs is recommended in the short term.

Photos

Quadville Public Works Garage - D502051



Quadville Public Works Garage - D502051

Recommendations

Recommendations #1 - Exit Lighting	
Type	Life Cycle Replacement
Year	2023
Cost	$1,742.01

G Building Sitework
G20 Site Improvements

Element Description	
Name	G202021 - Asphalt Paved Surfaces - Parking Area - Workshop
Installation Year	1970
Condition	3 - Fair
Expected Useful Life	25 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	400 / SM
Unit Cost	$95.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,715.87

Description

The parking area located to the south is gravel.

Condition Narrative

Deficiencies observed or reported, at the time of assessment include ravelling and worn surfaces. Previous repairs appear to have been attempted. Replacement is recommended.

Photos

Quadville Public Works Garage - G202021

Quadville Public Works Garage - G202021

Recommendations

Recommendations #1 - Asphalt Paved Surfaces - Parking Area	
Type	Life Cycle Replacement
Year	2026
Cost	$51,715.87

Element Description	
Name	G202025 - Vehicle Bollard (Limiting Devices) - Workshop
Installation Year	2015
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	21 Years
Renewal Year	2045
Quantity / Unit of Measure	6 / Each
Unit Cost	$1,890.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$15,433.10

Description

The site fuel supply tank area is provided with metal bollards on buried concrete pedestals.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - G202025

Recommendations

Recommendations #1 - Vehicle Bollard (Limiting Devices)	
Type	Life Cycle Replacement
Year	2045
Cost	$15,433.10

Element Description	
Name	G204081 - Message Sign - Wall-Mounted - Workshop
Installation Year	2023
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,500.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,082.83

Description

Signage is installed on the exterior walls of the the building for identification purposes.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. According to the client, the message sign was replaced in 2023.

Photos

Quadville Public Works Garage - C103021

Quadville Public Works Garage - C103021

Recommendations

Recommendations #1 - Message Sign - Wall-Mounted	
Type	Life Cycle Replacement
Year	2023
Cost	$4,082.83

G30 Site Mechanical Utilities

Element Description	
Name	G306004 - Fuel Storage Tanks - Aboveground Less than 10,000 L - Workshop
Installation Year	2015
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	3 Years
Renewal Year	2027
Quantity / Unit of Measure	6960 / L
Unit Cost	$43.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$122,191.00

Description

The site fuel supply area consists of double-walled metal storage tanks mounted on concrete footings and including fuel dispensing pumps.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - D301001

Quadville Public Works Garage - G306004

Recommendations

Recommendations #1 - Fuel Storage Tanks - Aboveground Less than 10,000 L	
Type	Life Cycle Replacement
Year	2027
Cost	$122,191.00

Element Description	
Name	G306004 - Fuel Storage Tanks - Aboveground Less than 10,000 L - Workshop
Installation Year	2015
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	3 Years
Renewal Year	2027
Quantity / Unit of Measure	2279 / L
Unit Cost	$43.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$40,010.53

Description

The site includes a double-walled metal fuel oil storage tank for the building oil-fired equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - G306004

Recommendations

Recommendations #1 - Fuel Storage Tanks - Aboveground Less than 10,000 L	
Type	Life Cycle Replacement
Year	2027
Cost	$40,010.53

Element Description	
Name	G306004 - Fuel Storage Tanks - Aboveground Less than 10,000 L - Workshop
Installation Year	1970
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	500 / L
Unit Cost	$43.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,778.09

Description

The site includes a double-walled waste oil tank.

Condition Narrative

Deficiencies observed include corrosion. Replacement is recommended in the short term.

Photos

Quadville Public Works Garage - G306004

Recommendations

Recommendations #1 - Fuel Storage Tanks - Aboveground Less than 10,000 L	
Type	Life Cycle Replacement
Year	2024
Cost	$8,778.09

G40 Site Electrical Utilities

Element Description	
Name	G401011 - Electrical Service - Workshop
Installation Year	1970
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	40 / LM
Unit Cost	$930.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$50,627.12

Description

The overhead electrical service is assumed to be equivalent to 200A 3 wire single phase from the utility to the building electrical service equipment. A portion of the service is underground (utility pole to equipment).

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Quadville Public Works Garage - G401011

Quadville Public Works Garage - G401011

Recommendations

Recommendations #1 - Electrical Service	
Type	Life Cycle Replacement
Year	2029
Cost	$50,627.12

18 RAGLAN TRANSFER STATION

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Raglan Transfer Station

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Raglan Transfer Station building, located at 2306 Schutt Rd., Palmer Rapids, ON, was reportedly constructed in 2018. The building is a single-storey structure with a reported gross floor area of approximately 6 SM (64 SF). The structure is used as a warming shack. The Building Assessment was undertaken on May 17, 2023.

Facility No	RTS1
Name	Raglan Transfer Station
Address	2306 Schutt Rd. - Palmer Rapids - ON - Canada
Area	64 SM
Floors	1
Year Constructed	2018
Condition Assessment Date	May 17, 2023
Replacement value	$22,959.36
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Raglan Transfer Station, located at 2306 Schutt Rd. - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 17, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	69 Years
Renewal Year	2093
Quantity / Unit of Measure	6 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,249.97

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely a wood joist floor supported on precast concrete footings and wood blocks, and load bearing wood stud walls supporting a roof deck with roof sheathing.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - A103001

Raglan Transfer Station - A103001

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	44 Years
Renewal Year	2068
Quantity / Unit of Measure	2 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$378.35

Description

Exterior soffits are covered with perforated metal panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - B201008

Raglan Transfer Station - B201008

Element Description	
Name	B201024 - Metal Cladding - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	18 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,923.94

Description

Exterior wall surfaces include prefinished metal siding with a vertical ribbed surface profile.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - B201024

Raglan Transfer Station - B201024

Element Description	
Name	B202001 - Windows - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	1 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,633.15

Description

Exterior windows are single-paned glazing units set in operable frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - B202001

Raglan Transfer Station - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2053
Cost	$1,633.15

Element Description	
Name	B203024 - Single Door - Wood - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$4,627.25

Description

Exterior single-door assemblies include a painted steel clad wood panel that is set within a painted wood frame.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - C102022

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2043
Cost	$4,627.25

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	7 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,791.63

Description

Pitched roof surfaces are covered with prefinished metal roofing panels that include exposed fasteners.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - B301028

D Services
D30 HVAC

Element Description	
Name	D301002 - Natural Gas Supply Piping and Fittings - Propane Supply - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	34 Years
Renewal Year	2058
Quantity / Unit of Measure	6 / SM
Unit Cost	$30.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$244.97

Description

The building propane supply consists of Polyethylene Gas tube piping and fittings from the utility meter to the gas-fired equipment.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - D301002

Raglan Transfer Station - D301002

Element Description	
Name	D302004 - Fuel-Fired Unit Heaters - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	12 Years
Renewal Year	2036
Quantity / Unit of Measure	1 / Each
Unit Cost	$3,940.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$2,681.09

Description

Building heating includes a natural gas-fired unit heater, with a heating capacity of approximately 10 MBH.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - D302004

Raglan Transfer Station - D302004

Recommendations

Recommendations #1 - Fuel-Fired Unit Heaters	
Type	Life Cycle Replacement
Year	2036
Cost	$2,681.09

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	4 Years
Renewal Year	2028
Quantity / Unit of Measure	1 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$351.13

Description

An ABC Type Fire Extinguisher is located next to the entrance space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2028
Cost	$351.13

D50 Electrical

Element Description	
Name	D503009 - Video Surveillance Systems - Warming Shack
Installation Year	2018
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	6 / SM Building
Unit Cost	$22.00
Difficulty / Regional / Soft Cost / Replacement	6.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,077.88

Description

The building includes a video surveillance system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan Transfer Station - G403099

Recommendations

Recommendations #1 - Video Surveillance Systems	
Type	Life Cycle Replacement
Year	2048
Cost	$1,077.88

Collaborative ❖ Passionate ❖ Consistently Curious

19 Raglan White Lake Beach

Roth IAMS
Integrated Asset Management Strategies
10 YEARS

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Raglan White Lake Beach

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Raglan Lake Beach building, located at 121 Raglan White Lake Rd., Palmer Rapids, ON, was reportedly constructed in 2022. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 12 SM (128 SF). The structure is used as a washroom and changing room. The Building Assessment was undertaken on May 17, 2023.

Facility No	RWLB1
Name	Raglan White Lake Beach
Address	121 Raglan White Lake Rd. - Palmer Rapids - ON - Canada
Area	128 SM
Floors	1
Year Constructed	2022
Condition Assessment Date	May 17, 2023
Replacement value	$104,026.09
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Raglan White Lake Beach, located at 121 Raglan White Lake Rd. - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 17, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A103001 - Slab on Grade - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	73 Years
Renewal Year	2097
Quantity / Unit of Measure	12 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	3.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$5,193.41

Description
Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible. The slab presumably includes an integrated below grade chamber for sanitary waste.

Condition Narrative
No major deficiencies were observed or reported. No cracking in concrete was observed.

Photos


Raglan White Lake Beach - A103001

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	8 Years
Renewal Year	2032
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$6,499.93

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely load bearing wood column walls and beams supporting a wood roof joist and rafter system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan White Lake Beach - B201010

Raglan White Lake Beach - B103001

Recommendations

Recommendations #1 - Structure	
Type	Life Cycle Replacement
Year	2032
Cost	$6,499.93

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	4 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$756.69

Description

Exterior soffits are covered with perforated aluminum panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan White Lake Beach - B201008

Raglan White Lake Beach - B201008

Element Description	
Name	B201024 - Metal Cladding - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	36 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$9,847.88

Description

Exterior wall surfaces include prefinished metal siding with a vertical clapboard surface profile.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan White Lake Beach - B201024

Raglan White Lake Beach - B201024

Element Description	
Name	B203023 - Single Door - Hollow Metal - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	28 Years
Renewal Year	2052
Quantity / Unit of Measure	2 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,942.09

Description

Exterior single-door assemblies include painted steel panels that are set within painted steel frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan White Lake Beach - B203023

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2052
Cost	$10,942.09

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	38 Years
Renewal Year	2062
Quantity / Unit of Measure	14 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$7,583.25

Description

Pitched roof surfaces are covered with prefinished metal roofing panels that include exposed fasteners.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan White Lake Beach - B301028

Raglan White Lake Beach - B301028

C Interiors
C30 Interior Finishes

Element Description	
Name	C301099 - Other Wall Finishes - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	28 Years
Renewal Year	2052
Quantity / Unit of Measure	1 / Lump Sum
Unit Cost	$5,000.00
Difficulty / Regional / Soft Cost / Replacement	1.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$10,207.18

Description
Wall and ceiling surfaces are covered with prefinished metal siding and trim.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan White Lake Beach - C301099


Raglan White Lake Beach - C301099


Raglan White Lake Beach - C301099

Recommendations

Recommendations #1 - Other Wall Finishes	
Type	Life Cycle Replacement
Year	2052
Cost	$10,207.18

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	33 Years
Renewal Year	2057
Quantity / Unit of Measure	1 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$816.57

Description

The plumbing fixtures include a floor-mounted composite toilet.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan White Lake Beach - D201001

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Washroom/Changeroom
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	12 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$979.89

Description

The building sanitary waste drainage, where visible, consists of a PVC pipe vent line for the site septic system.

Condition Narrative

No significant deficiencies or leaks were observed or reported. Replacement is not anticipated in the short term.

Photos

Raglan White Lake Beach - D203001

Raglan White Lake Beach - D203001

G Building Sitework
G30 Site Mechanical Utilities

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Washroom/Change room
Installation Year	2022
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	48 Years
Renewal Year	2072
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$51,199.20

Description
The building site includes a septic system comprising an underground concrete septic tank.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

20 STORAGE BUILDING – QUADEVILLE

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Storage Building - Quadeville

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Storage Building - Quadeville, located at 3310 Quadeville Rd., Palmer Rapids, ON, was reportedly constructed in 1974. The original building is a single-storey building with a reported gross floor area of approximately 76 SM (818 SF). The building is used as for storage. The site visit was done on May 18, 2023.

Facility No	SBQ1
Name	Storage Building - Quadeville
Address	3310 Quadeville Rd. - Palmer Rapids - ON - Canada
Area	818 SM
Floors	1
Year Constructed	1974
Condition Assessment Date	May 18, 2023
Replacement value	$144,737.77
3 Year FCI	71.6%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Storage Building - Quadeville, located at 3310 Quadeville Rd. - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 18, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

4 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of Township of Brudenell, Lyndoch, and Raglan . The report may not be relied upon by any other person or entity without the express written consent of Roth IAMS Ltd.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. Roth IAMS Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for facility condition assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. Roth IAMS Ltd. did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

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

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

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

5 CONDITION ASSESSMENT REPORT

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Storage Building
Installation Year	1974
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	25 Years
Renewal Year	2049
Quantity / Unit of Measure	76 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$41,166.23

Description

At the time of the assessment, where accessible in exposed areas for visual review on site, the building structural framing system is likely a wood joist floor supported on precast concrete and wood board footings, and load bearing wood column walls and beams supporting a wood roof joist and rafter system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Storage Building - Quadeville - B103001

Storage Building - Quadeville - B103001

Storage Building - Quadeville - B103001

Storage Building - Quadeville - B103001

Recommendations

Recommendations #1 - Structure	
Type	Life Cycle Replacement
Year	2049
Cost	$41,166.23

B20 Exterior Enclosure

Element Description	
Name	B201026 - Wood Siding - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	30 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	107 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$36,696.84

Description

Exterior wall surfaces include wood planks and plywood .

Condition Narrative

Deficiencies observed or reported during the assessment include damaged surfaces, rot, deformation, loose connections, loose components, staining, fading, and gaps in material coverage. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Storage Building - Quadeville - B201026

Storage Building - Quadeville - B201026

Storage Building - Quadeville - B201026

Storage Building - Quadeville - B201026

Recommendations

Recommendations #1 - Wood Siding	
Type	Life Cycle Replacement
Year	2024
Cost	$36,696.84

Element Description	
Name	B202001 - Windows - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	35 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	5 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$8,165.74

Description

Exterior windows are single-paned glazing units set in fixed frames.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged glazing, degraded sealant and worn framework and trim. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Storage Building - Quadeville - B202001

Storage Building - Quadeville - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2024
Cost	$8,165.74

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	40 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	91 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$49,291.14

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

Deficiencies observed or reported during the assessment include evidence of moisture infiltration and corroded panels as well as fasteners. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Storage Building - Quadeville - B301028

Storage Building - Quadeville - B301028

Recommendations

Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2024
Cost	$49,291.14

C Interiors
C10 Interior Construction

Element Description	
Name	C102022 - Single Door - Wood - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	40 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$3,429.61

Description
Exterior single-door assemblies include a wood panel set within a wood frame.

Condition Narrative
Deficiencies observed or reported during the assessment include damaged surfaces, wood rot and worn hardware. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos


Storage Building - Quadeville - C102022

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2024
Cost	$3,429.61

Element Description	
Name	C102025 - Double Door - Wood - Storage Building
Installation Year	1974
Condition	4 - Poor
Expected Useful Life	40 Years
Remaining Useful Life	0 Years
Renewal Year	2024
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,400.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$5,988.21

Description

Exterior double-door assemblies include wood panels set within a wood frame.

Condition Narrative

Deficiencies observed or reported during the assessment include damaged surfaces, wood rot and worn hardware. The deterioration is anticipated to progress. Replacement is recommended in the short term.

Photos

Storage Building - Quadeville - C102025

Storage Building - Quadeville - C102025

Recommendations

Recommendations #1 - Double Door - Wood	
Type	Life Cycle Replacement
Year	2024
Cost	$5,988.21

21 STORAGE SHED 2 – QUADEVILLE

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Storage Shed 2 - Quadeville

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

Storage Shed 2 - Quadeville, located at 3310 Quadeville Rd., Palmer Rapids, ON, was reportedly constructed in 1980. The original building is a single-storey quonset building with a reported gross floor area of approximately 56 SM (600 SF). The building is used as for storage. The site visit was done on May 18, 2023.

Facility No	SSQ1
Name	Storage Shed 2 - Quadeville
Address	3310 Quadeville Rd. - Palmer Rapids - ON - Canada
Area	600 SM
Floors	1
Year Constructed	1980
Condition Assessment Date	May 18, 2023
Replacement value	$42,516.30
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Storage Shed 2 - Quadeville, located at 3310 Quadeville Rd. - Palmer Rapids - ON - Canada.

The site visit was undertaken on May 18, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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

The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by Roth IAMS Ltd., at their discretion, to identify deficiencies and appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by Roth IAMS Ltd. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the FCA cost tables. The exception are deficiency costs relating to life, safety or accessibility, these may be included regardless of this cost threshold.

2.1 Deviations from the Guide

The major deviations from ASTM E2018-15 for this project that was not included are as follows:

- A review of municipal/public records for zoning;
- A comprehensive building and/or fire & life safety code/regulatory review for compliance. It is assumed that at the time of building construction/commission and/or subsequent renovation(s), a duty of care was undertaken to ensure the building and related structures were constructed in accordance with the current building and fire code, as well as reviewed and approved by the local authorities having jurisdiction; and
- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

Table 1 – Condition Rating

Rating	Definition
1: Good	The element is functioning as intended; normal deterioration may be observed. However, no repairs are anticipated within the next 5 years. The lifecycle replacement, which is based on the EUL and age, is anticipated in the long term (RUL 5 years +).
2: Fair	The element is generally functioning as intended and based on the EUL and age, the lifecycle replacement is anticipated in the long term (5 years +). However, at isolated locations, the deterioration (the estimated repair cost is < 30% of the element lifecycle cost) observed requires a major repair to either maintain element continued performance or extend EUL (service life). The lifecycle replacement is recommended in the long term (RUL is 5 years +). The major repair is recommended in short term (1 to 4 years). An engineering study may be required to confirm, the scope, cost, and schedule of the major repair.
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5 CONDITION ASSESSMENT REPORT

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Storage Building
Installation Year	1980
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	31 Years
Renewal Year	2055
Quantity / Unit of Measure	67 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$36,291.28

Description
Dome roof surfaces are covered with metal roofing panels on wood board and precast concrete footings.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Storage Shed 2 - Quadeville - B301028


Storage Shed 2 - Quadeville - B301028


Storage Shed 2 - Quadeville - B103001

B20 Exterior Enclosure

Element Description	
Name	B201024 - Metal Cladding - Storage Building
Installation Year	1980
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	4 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04689 / 1.30000 / 1.0000
Element Cost	$1,094.21

Description
Exterior wall surfaces include metal siding panels.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Storage Shed 2 - Quadeville - B201024


Storage Shed 2 - Quadeville - B201024

Recommendations

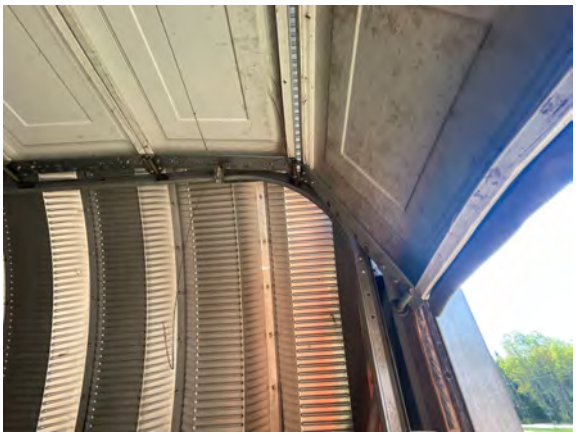
Recommendations #1 - Metal Cladding	
Type	Life Cycle Replacement
Year	2029
Cost	$1,094.21

C Interiors
C10 Interior Construction

Element Description	
Name	C102005 - Overhead Doors - Standard - Storage Building
Installation Year	1980
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Each
Unit Cost	$7,540.00
Difficulty / Regional / Soft Cost / Replacement	0.50 / 1.04689 / 1.30000 / 1.0000
Element Cost	$5,130.81

Description
Sectional panel overhead doors are provided on the building exterior.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Storage Shed 2 - Quadeville - C102005


Storage Shed 2 - Quadeville - C102005

Storage Shed 2 - Quadeville - C102005

Recommendations

Recommendations #1 - Overhead Doors - Standard	
Type	Life Cycle Replacement
Year	2029
Cost	$5,130.81

22 TOWNSHIP OFFICE

Brudenell Lyndoch and Raglan

Submission to
Township of Brudenell, Lyndoch, and Raglan

Facility Condition Assessment Report
Township Office

Version
Final

Date
January 16, 2024

Prepared by:
Roth IAMS Ltd.
Project No. 23502
www.rothiams.com

Roth IAMS
Integrated Asset Management Strategies

10 YEARS 2014 - 2024

Executive Summary

Facility Summary

The Township Office Office building, located at 42 Burnt Bridge Rd, Palmer Rapids, ON, was reportedly constructed in 1994, and another section was added in 2013. The building is a single-storey structure without a basement and has a reported gross floor area of approximately 211 SM (2220 SF). The structure is used as an office building. The Building Assessment was undertaken on May 16, 2023.

Facility No	TO
Name	Township Office
Address	42 Burnt Bridge Rd - Palmer Rapids - ON - Canada
Area	2220 SM
Floors	1
Year Constructed	1994
Condition Assessment Date	April 05, 2023
Replacement value	$1,198,731.74
3 Year FCI	0%

Table of Contents

1 INTRODUCTION

Roth IAMS Ltd., was retained by Township of Brudenell, Lyndoch, and Raglan to undertake a Building Condition Assessment (BCA) of Township Office, located at 42 Burnt Bridge Rd - Palmer Rapids - ON - Canada.

The site visit was undertaken on April 05, 2023.

2 SCOPE OF WORK

The scope of work was generally based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15) and included:

- Background Information Request and Review;
- Interview(s) with Knowledgeable Site Staff;
- Walk-through Site Assessment Visit; and
- Preparation of a comprehensive report.

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The review of the site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to determine their condition and to identify physical deficiencies, where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the

mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition, with considerations of the reported performance. No physical tests were conducted on these systems.

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- A review of municipal/regional records to determine if the property resides in a designated flood plain.

Furthermore, the BCA did not include a:

- Verification of the number of parking spaces;
- Verification of gross and net usable areas of the site building(s); and
- Review of as-built construction drawings for the building and site.

3 CONDITION RATING

Roth IAMS Ltd. applied a condition rating to each component assessed and included in the report. Table 1 outlines the condition rating system utilized.

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Rating	Definition
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3: Poor	The element is not functioning as intended, failed or at risk of imminent failure. The deterioration and distress observed is systemic (>30 % of the element estimated replacement cost). To minimize disruption to the building operations (frequent maintenance calls) and/or to maintain element continued performance, an element lifecycle replacement is required in the next 2 years (RUL 0 -2 years).

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

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

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

5 CONDITION ASSESSMENT REPORT

A Substructure
A10 Foundations

Element Description	
Name	A101001 - Standard Foundations - Administration
Installation Year	1994
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	45 Years
Renewal Year	2069
Quantity / Unit of Measure	60 / LM Footprint
Unit Cost	$1,460.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$119,218.69

Description
Based on the information gathered during the assessment, the foundations are standard shallow foundations bearing on good native soil. Due to the hidden nature of the building foundations, a visual site confirmation of the foundation type was not possible.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Element Description	
Name	A103001 - Slab on Grade - Administration
Installation Year	1994
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	45 Years
Renewal Year	2069
Quantity / Unit of Measure	140 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$20,196.41

Description

Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible.

Condition Narrative

No significant deficiencies were observed or reported. No cracking in concrete was observed.

Photos

Township Office - A103001

Township Office - A103001

Element Description	
Name	A103001 - Slab on Grade - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	64 Years
Renewal Year	2088
Quantity / Unit of Measure	67 / SM Footprint
Unit Cost	$106.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,665.42

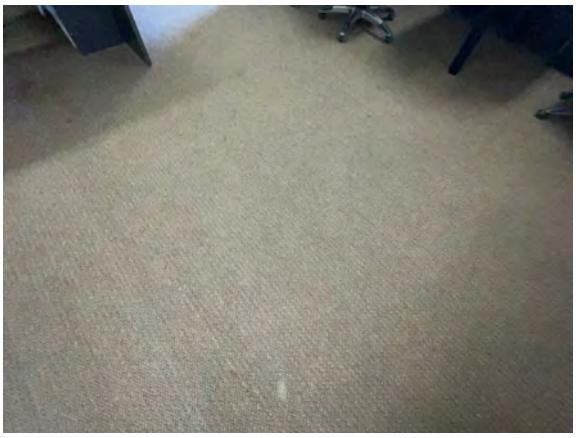
Description

Based on the information gathered during the assessment, the first-floor slab appears to be cast-in-place concrete continuously supported by a moisture barrier on free-draining gravel. A visual site confirmation to determine if the element is a potential structural slab was not possible. Typically slab was surfaced with an architectural finish of carpet.

Condition Narrative

No significant deficiencies were observed or reported. No cracking in concrete was observed.

Photos



Township Office - A103001

B Shell
B10 Superstructure

Element Description	
Name	B103001 - Structure - Administration
Installation Year	1994
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	45 Years
Renewal Year	2069
Quantity / Unit of Measure	140 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$75,831.80

Description

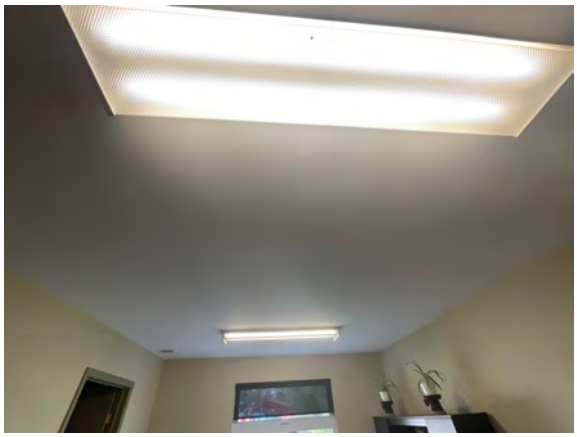
Based on the information gathered during the assessment, the building overall structure likely consists of concrete masonry unit (CMU) walls and metal beams supporting a wood truss with roof sheathing.

Condition Narrative

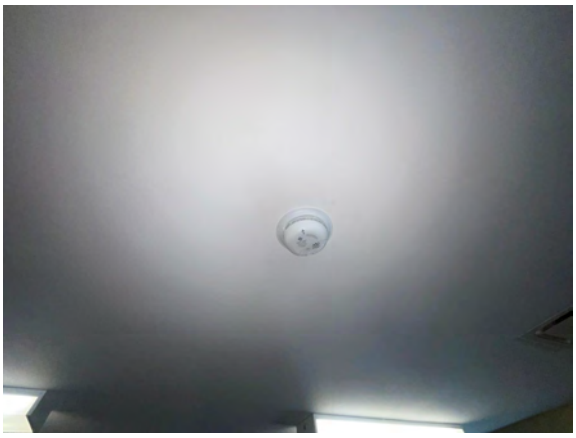
No significant deficiencies were observed or reported on the exposed structural framing system. No significant deterioration was noted or signs to suggest any deterioration or twisting/ movement of the building structure.

Photos

Township Office - B103001



Township Office - B103001



Township Office - B103001

Element Description	
Name	B103001 - Structure - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	64 Years
Renewal Year	2088
Quantity / Unit of Measure	67 / SM Building
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$36,290.93

Description

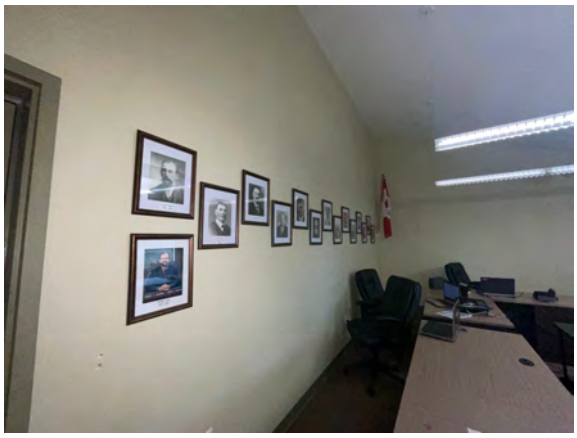
Based on the information gathered during the assessment, the building's overall structure likely consists of concrete masonry unit (CMU) walls and metal beams supporting a wood truss with roof sheathing.

Condition Narrative

No significant deficiencies were observed or reported on the exposed structural framing system. No significant deterioration was noted or signs to suggest any deterioration or twisting/ movement of the building structure.

Photos

Township Office - B103001



Township Office - B103001

B20 Exterior Enclosure

Element Description	
Name	B201008 - Exterior Soffits - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	39 Years
Renewal Year	2063
Quantity / Unit of Measure	64 / SM
Unit Cost	$139.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$12,106.96

Description
Exterior soffits are covered with perforated, prefinished aluminum panels.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - B201008


Township Office - B201008

Element Description	
Name	B201024 - Metal Cladding - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	42 / SM
Unit Cost	$201.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$11,489.09

Description

Exterior wall surfaces include metal siding panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - B201024

Township Office - B201024

Recommendations

Recommendations #1 - Metal Cladding	
Type	Life Cycle Replacement
Year	2053
Cost	$11,489.09

Element Description	
Name	B201026 - Wood Siding - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	130 / SM
Unit Cost	$252.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$44,584.53

Description

Exterior wall surfaces are clad with wood siding.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - B201026

Township Office - B201026

Recommendations

Recommendations #1 - Wood Siding	
Type	Life Cycle Replacement
Year	2043
Cost	$44,584.53

Element Description	
Name	B201032 - Stone Veneer - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	64 Years
Renewal Year	2088
Quantity / Unit of Measure	6 / SM
Unit Cost	$1,010.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,247.32

Description

A mortar-set stone tile is provided on exterior wall surfaces.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - B201021

Township Office - B201021

Element Description	
Name	B202001 - Windows - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	14 / SM
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,863.86

Description

Exterior windows are insulated glazing units set in fixed frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - B202001

Township Office - B202001

Township Office - B202001

Township Office - B202001

Recommendations

Recommendations #1 - Windows	
Type	Life Cycle Replacement
Year	2048
Cost	$22,863.86

Element Description	
Name	B203008 - Automatic Door Openers - Administration
Installation Year	2013
Condition	3 - Fair
Expected Useful Life	15 Years
Remaining Useful Life	4 Years
Renewal Year	2028
Quantity / Unit of Measure	1 / Each
Unit Cost	$5,030.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,845.55

Description

Select entry doors include automatic door openers complete with internal and external push-button controls.

Condition Narrative

Deficiencies observed or reported during the assessment include worn controls and hardware. Replacement is recommended in the short term.

Photos

Township Office - B203008

Recommendations

Recommendations #1 - Automatic Door Openers	
Type	Life Cycle Replacement
Year	2028
Cost	$6,845.55

Element Description	
Name	B203023 - Single Door - Hollow Metal - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	3 / Each
Unit Cost	$4,020.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$16,412.98

Description

Exterior swing-type single-door assemblies include painted and insulated steel panels that are hinge-mounted within painted steel frames. Select door panels include vision lites composed of insulated double-glazing units.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - B203023

Township Office - B203023

Recommendations

Recommendations #1 - Single Door - Hollow Metal	
Type	Life Cycle Replacement
Year	2043
Cost	$16,412.98

Element Description	
Name	B203025 - Single Door - Aluminum and Glass - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	2 / Each
Unit Cost	$6,280.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,093.46

Description

Exterior single-door assemblies include aluminum panels with insulated glazing units that are set within matching frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - B203025

Township Office - B203025

Recommendations

Recommendations #1 - Single Door - Aluminum and Glass	
Type	Life Cycle Replacement
Year	2048
Cost	$17,093.46

B30 Roofing

Element Description	
Name	B301028 - Metal Roofing - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	253 / SM
Unit Cost	$398.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$137,038.90

Description

Pitched roof surfaces are covered with metal roofing panels.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D502002

Township Office - D502002

Recommendations

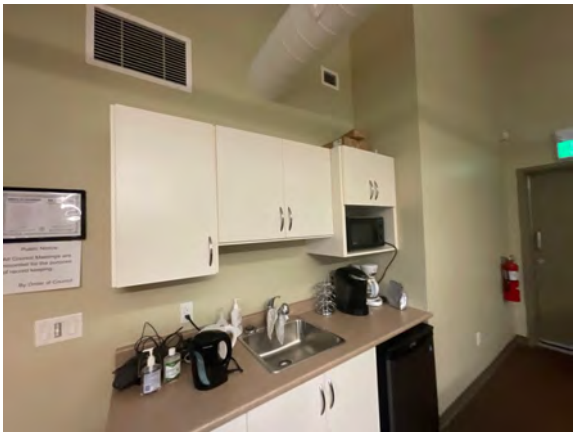
Recommendations #1 - Metal Roofing	
Type	Life Cycle Replacement
Year	2053
Cost	$137,038.90

C Interiors
C10 Interior Construction

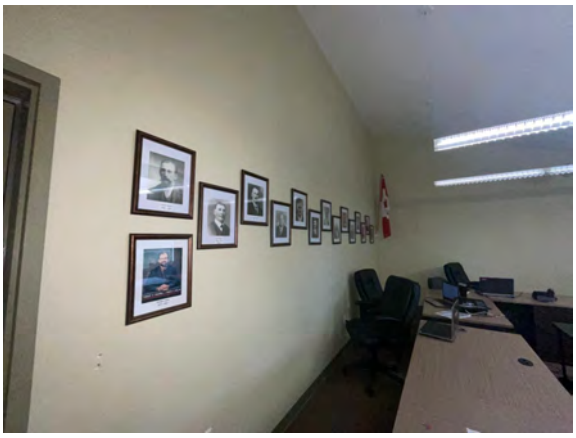
Element Description	
Name	C101001 - Fixed Partitions - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	64 Years
Renewal Year	2088
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$40,489.44

Description
Interior fixed partitions include wall and ceiling gypsum board.

Condition Narrative
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - C101001


Township Office - C101001


Township Office - C101001

Element Description	
Name	C101005 - Interior Windows - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	75 Years
Remaining Useful Life	64 Years
Renewal Year	2088
Quantity / Unit of Measure	5 / SM
Unit Cost	$754.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$5,130.76

Description

Interior windows include glass panels set in fixed frames.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - C101005

Element Description	
Name	C102022 - Single Door - Wood - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	8 / Each
Unit Cost	$2,520.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$27,436.63

Description

Interior single-door assemblies include wood panels that are set within steel frames.

Condition Narrative

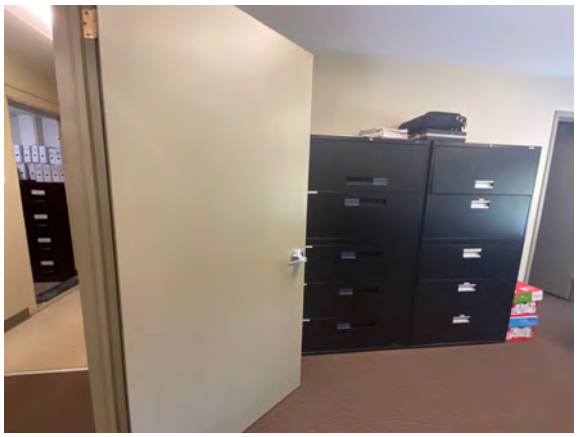
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - C102022

Township Office - C102022

Township Office - C102022



Township Office - C102022

Recommendations

Recommendations #1 - Single Door - Wood	
Type	Life Cycle Replacement
Year	2053
Cost	$27,436.63

Element Description	
Name	C102099 - Other Interior Doors - Administration
Installation Year	1974
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	1 / Lump Sum
Unit Cost	$5,460.00
Difficulty / Regional / Soft Cost / Replacement	2.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$14,861.51

Description

The interior door of solid metal construction is installed at the vault.

Condition Narrative

No significant deficiencies were observed or reported. The vault door appears to be original from a another building. Replacement is not anticipated in the short term.

Photos

Township Office - C102099

Recommendations

Recommendations #1 - Other Interior Doors	
Type	Life Cycle Replacement
Year	2029
Cost	$14,861.51

Element Description	
Name	C103009 - Fixed Casework - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	6 / LM
Unit Cost	$1,890.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$15,433.10

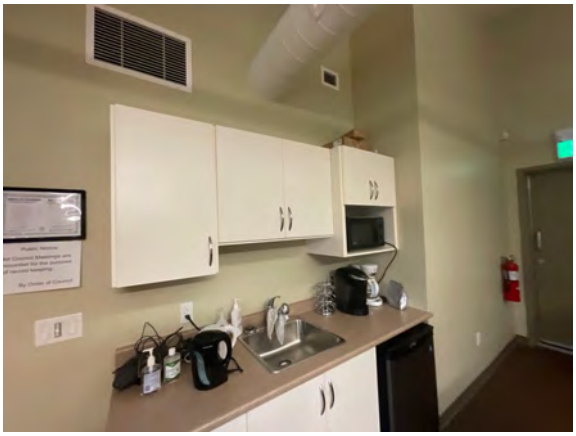
Description

Fixed casework of wood construction is provided in the building.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Township Office - C103009

Township Office - C103009

Recommendations

Recommendations #1 - Fixed Casework	
Type	Life Cycle Replacement
Year	2048
Cost	$15,433.10

C30 Interior Finishes

Element Description	
Name	C301005 - Paint Wall Covering - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$53.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$15,219.44

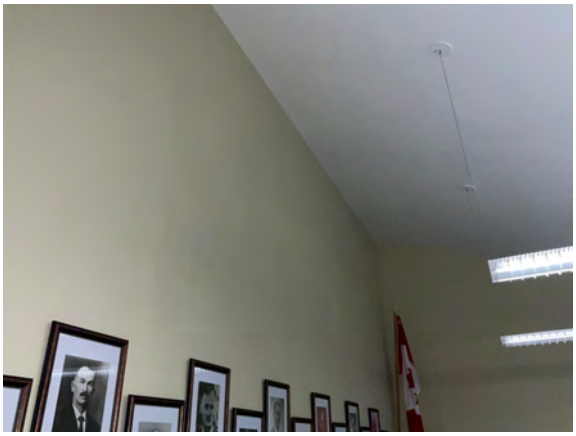
Description

A paint finish is applied to most wall surfaces in the building.

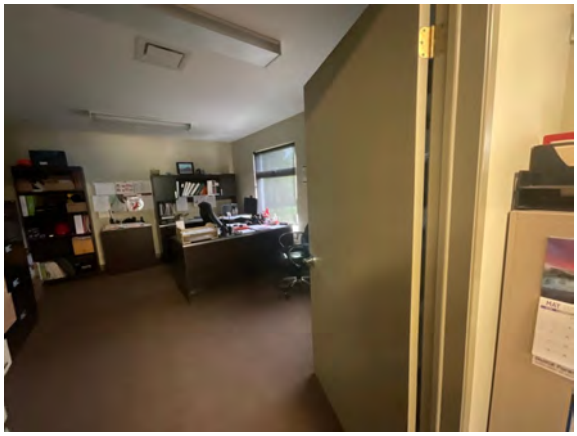
Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos



Township Office - C301005



Township Office - C301005

Township Office - C301005

Recommendations

Recommendations #1 - Paint Wall Covering	
Type	Life Cycle Replacement
Year	2029
Cost	$15,219.44

Element Description	
Name	C302005 - Carpet Floor - Administration
Installation Year	2013
Condition	3 - Fair
Expected Useful Life	10 Years
Remaining Useful Life	2 Years
Renewal Year	2026
Quantity / Unit of Measure	50 / SM
Unit Cost	$114.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$7,757.38

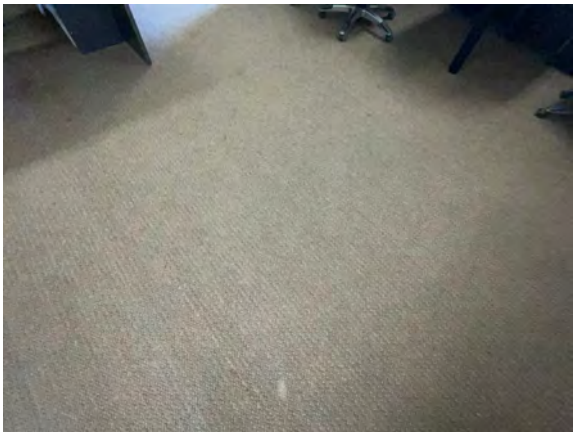
Description

Broadloom carpet placed over a padding underlay is provided on floor surfaces.

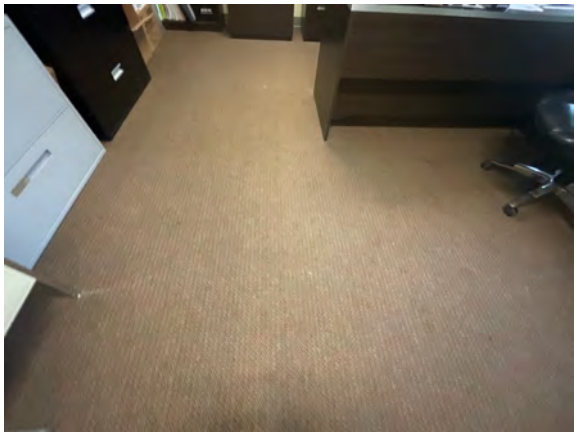
Condition Narrative

Deficiencies observed or reported during the assessment include damaged and frayed surfaces and wear and deterioration. The deterioration is anticipated to progress due to age and ongoing building activities. Replacement is recommended in the short term.

Photos



Township Office - C302005



Township Office - C302005

Recommendations

Recommendations #1 - Carpet Floor	
Type	Life Cycle Replacement
Year	2026
Cost	$7,757.38

Element Description	
Name	C302023 - Vinyl Sheet Floor - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	50 / SM
Unit Cost	$158.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,751.46

Description

Resilient vinyl sheeting is adhered to floor surfaces.

Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred.

Photos

Township Office - C302023

Township Office - C302023

Recommendations

Recommendations #1 - Vinyl Sheet Floor	
Type	Life Cycle Replacement
Year	2029
Cost	$10,751.46

Element Description	
Name	C303006 - Painted Ceiling Structures - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	205 / SM
Unit Cost	$38.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$10,601.75

Description

A paint application is provided on gypsum board ceilings.

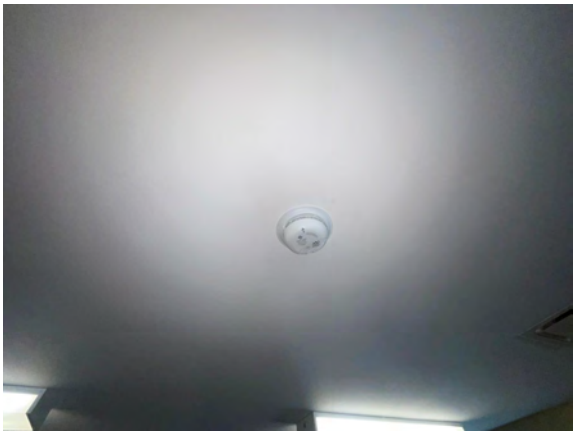
Condition Narrative

No significant deficiencies were observed or reported. Lifecycle replacement may be deferred. However minor peeling was noted, and repair is recommended as a part of ongoing maintenance.

Photos

Township Office - C303006

Township Office - C303006



Township Office - C303006

Recommendations

Recommendations #1 - Painted Ceiling Structures	
Type	Life Cycle Replacement
Year	2029
Cost	$10,601.75

Element Description	
Name	C303007 - Suspended Acoustic Ceiling Panels - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	14 Years
Renewal Year	2038
Quantity / Unit of Measure	6 / SM
Unit Cost	$114.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$930.89

Description

Metal T-bar grids with drop-in acoustic panels are suspended from the ceiling structure in the washroom.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - C303007

Recommendations

Recommendations #1 - Suspended Acoustic Ceiling Panels	
Type	Life Cycle Replacement
Year	2038
Cost	$930.89

D Services
D20 Plumbing

Element Description	
Name	D201001 - Water Closets - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,266.27

Description

The plumbing fixtures include floor-mounted vitreous china water closets. The water closets are equipped with manual flush devices.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D201001

Township Office - D201001

Recommendations

Recommendations #1 - Water Closets	
Type	Life Cycle Replacement
Year	2048
Cost	$3,266.27

Element Description	
Name	D201003 - Lavatories - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	2 / Each
Unit Cost	$1,200.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$3,266.27

Description

The plumbing fixtures include vitreous china lavatories. The lavatories are equipped with manual tap-sets.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D201003

Township Office - D201003

Recommendations

Recommendations #1 - Lavatories	
Type	Life Cycle Replacement
Year	2048
Cost	$3,266.27

Element Description	
Name	D202001 - Domestic Water Piping and Fittings - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,229.55

Description

The building domestic water distribution, where visible, consists of cold and hot water copper pipe supply lines and risers. The distribution includes fittings, valves. The cold water is supplied from the local well system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D202001

Township Office - D202001

Recommendations

Recommendations #1 - Domestic Water Piping and Fittings	
Type	Life Cycle Replacement
Year	2053
Cost	$17,229.55

Element Description	
Name	D202008 - Domestic Water Expansion Tanks/Pressure Tanks - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	1 / Each
Unit Cost	$4,590.00
Difficulty / Regional / Soft Cost / Replacement	0.30 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,874.02

Description

The domestic water distribution includes an expansion tank with a regulator. The tank is manufactured by Bell & Gossett and is located in the mechanical room. The tank has a capacity of 12 L.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D202008

Recommendations

Recommendations #1 - Domestic Water Expansion Tanks/Pressure Tanks	
Type	Life Cycle Replacement
Year	2043
Cost	$1,874.02

Element Description	
Name	D202034 - Domestic Water Heaters - Residential Gas-Fired - Administration
Installation Year	2013
Condition	3 - Fair
Expected Useful Life	12 Years
Remaining Useful Life	3 Years
Renewal Year	2027
Quantity / Unit of Measure	65 / Liter
Unit Cost	$32.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,830.76

Description

The domestic water distribution includes a residential-grade natural gas-fired domestic hot water heater. The water heater has a storage capacity of 65 L. The unit is manufactured by SpaceSaver, the specification label was not accessible at the time of the visit.

Condition Narrative

No significant deficiencies were observed or reported. However, the system, based on age, is approaching its expected useful life with performance and reliability likely diminishing over time. Replacement is recommended in the short term.

Photos

Township Office - D202034

Recommendations

Recommendations #1 - Domestic Water Heaters - Residential Gas-Fired	
Type	Life Cycle Replacement
Year	2027
Cost	$2,830.76

Element Description	
Name	D203001 - Sanitary Waste and Vent Piping and Fittings - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	39 Years
Renewal Year	2063
Quantity / Unit of Measure	221 / SM Building
Unit Cost	$60.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$18,046.12

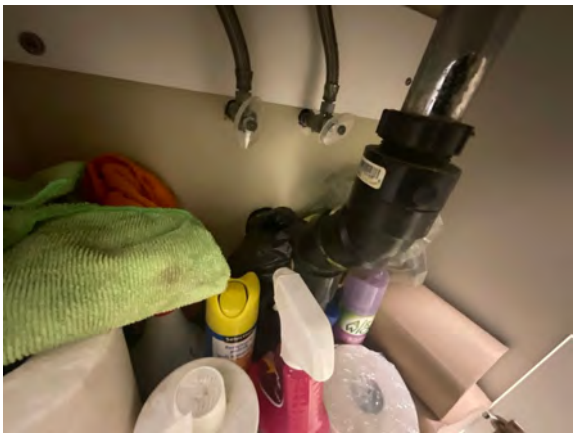
Description

The building sanitary waste drainage, where visible, consists of cast iron and PVC pipe drain lines and risers. The drainage includes steel pipe vents, traps, and floor drains. The sanitary waste drainage connects to the site's septic system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Township Office - D203001

Township Office - D203001

Recommendations

Recommendations #1 - Sanitary Waste and Vent Piping and Fittings	
Type	Life Cycle Replacement
Year	2063
Cost	$18,046.12

D30 HVAC

Element Description	
Name	D301002 - Natural Gas Supply Piping and Fittings - Propane Supply - Administration
Installation Year	1994
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	10 Years
Renewal Year	2034
Quantity / Unit of Measure	211 / SM
Unit Cost	$30.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,614.78

Description

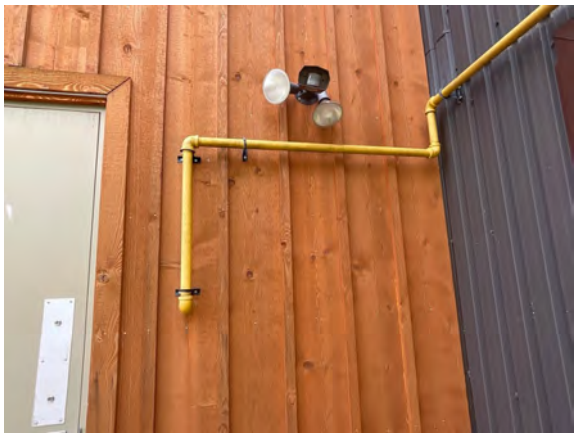
The building propane supply consists of steel piping and fittings from the utility meter to the propane-fired equipment. The piping is painted with a corrosion inhibiting coating where exposed.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D301002



Township Office - D301002

Township Office - D301002

Recommendations

Recommendations #1 - Natural Gas Supply Piping and Fittings	
Type	Life Cycle Replacement
Year	2034
Cost	$8,614.78

Element Description	
Name	D302003 - Fuel Fired Forced Air Furnaces - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	7 Years
Renewal Year	2031
Quantity / Unit of Measure	100 / MBH
Unit Cost	$66.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$8,982.23

Description

Building heating consists of a natural propane-fired forced air furnace. The furnace is manufactured by York and has an input heating capacity of 100 MBH. The unit is located in the mechanical room.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D302003

Recommendations

Recommendations #1 - Fuel Fired Forced Air Furnaces	
Type	Life Cycle Replacement
Year	2031
Cost	$8,982.23

Element Description	
Name	D303021 - Refrigerant DX Condensing Units - 1 to 5 Tons - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	7 Years
Renewal Year	2031
Quantity / Unit of Measure	1 / Each
Unit Cost	$5,030.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$6,845.55

Description

Building cooling includes an air-cooled condensing unit identified as a split system air conditioning system. The condensing unit is manufactured by York model YCJF60S41S2A, serial number W1L159737, and has a cooling capacity of 3 tons. The unit is charged with refrigerant R-410a and is located on grade.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D303041

Township Office - D303041

Recommendations

Recommendations #1 - Refrigerant DX Condensing Units - 1 to 5 Tons	
Type	Life Cycle Replacement
Year	2031
Cost	$6,845.55

Element Description	
Name	D304001 - Air Distribution Systems - Administration
Installation Year	2017
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	43 Years
Renewal Year	2067
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$178.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,114.33

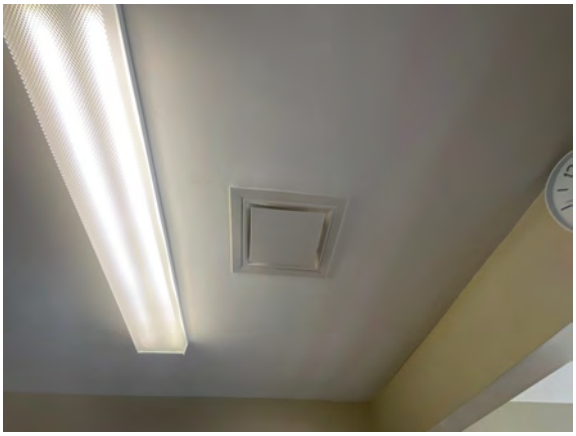
Description

The building air distribution, where visible, consists of a network of galvanized sheet metal supply, return and exhaust air ductwork. The distribution includes dampers, diffusers and grilles. The ductwork is partially insulated where exposed.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Township Office - D304001

Township Office - D304001

Township Office - D304001

Recommendations

Recommendations #1 - Air Distribution Systems	
Type	Life Cycle Replacement
Year	2067
Cost	$51,114.33

Element Description	
Name	D304033 - Exhaust Fans - Residential - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	25 Years
Remaining Useful Life	14 Years
Renewal Year	2038
Quantity / Unit of Measure	3 / Each
Unit Cost	$1,150.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,695.26

Description

Building ventilation includes exhaust fans for ventilation in washrooms.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D304033

Township Office - D304033

Recommendations

Recommendations #1 - Exhaust Fans - Residential	
Type	Life Cycle Replacement
Year	2038
Cost	$4,695.26

Element Description	
Name	D304053 - Heat Recovery Ventilators (Residential) - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	9 Years
Renewal Year	2033
Quantity / Unit of Measure	2 / Each
Unit Cost	$3,440.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$9,363.29

Description

Building ventilation includes a heat recovery ventilation HRV system. The system is manufactured by VanEE, model number 44202, serial number QF36130101095 and is located in the vault and mechanical room.

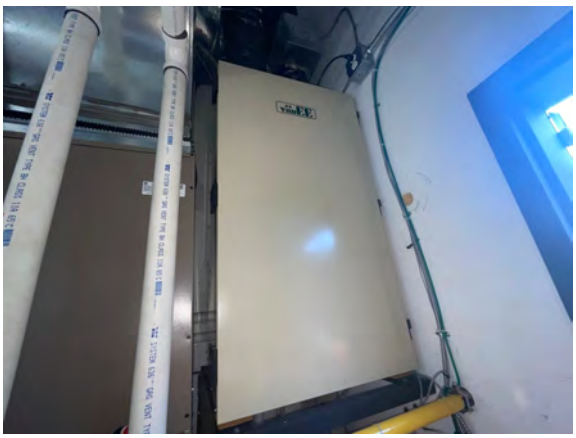
Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D502002

Township Office - D502002



Township Office - D304053

Recommendations

Recommendations #1 - Heat Recovery Ventilators (Residential)	
Type	Life Cycle Replacement
Year	2033
Cost	$9,363.29

Element Description	
Name	D305010 - Electric Baseboard Heaters - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	18 Years
Remaining Useful Life	7 Years
Renewal Year	2031
Quantity / Unit of Measure	6 / Each
Unit Cost	$360.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$2,939.64

Description

The building HVAC includes perimeter electric baseboard heaters. The units are located in the offices and various rooms.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D305010

Township Office - D305010

Township Office - D305010

Recommendations

Recommendations #1 - Electric Baseboard Heaters	
Type	Life Cycle Replacement
Year	2031
Cost	$2,939.64

D40 Fire Protection

Element Description	
Name	D403001 - Individual Fire Extinguishers - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	2 / Each
Unit Cost	$258.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$702.25

Description

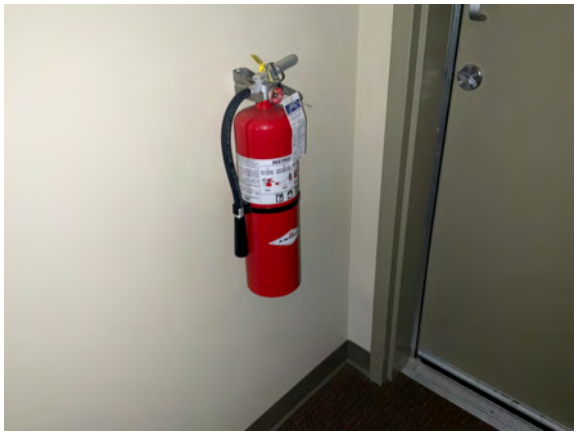
ABC Type Fire Extinguishers are located in the corridors and common area space.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D403002



Township Office - D403002

Recommendations

Recommendations #1 - Individual Fire Extinguishers	
Type	Life Cycle Replacement
Year	2029
Cost	$702.25

D50 Electrical

Element Description	
Name	D501031 - Electrical Distribution - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	40 Years
Remaining Useful Life	29 Years
Renewal Year	2053
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$79.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,685.58

Description

The electrical distribution consists of switchboards, panelboards, disconnects, feeders, and associated equipment. The feeders are insulated copper wire in rigid metal conduit. The distribution is fed by the main service disconnect in the garage.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D501031

Township Office - D501031

Township Office - D501031

Recommendations

Recommendations #1 - Electrical Distribution	
Type	Life Cycle Replacement
Year	2053
Cost	$22,685.58

Element Description	
Name	D502001 - Branch Wiring and Devices - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	39 Years
Renewal Year	2063
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$141.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$40,489.44

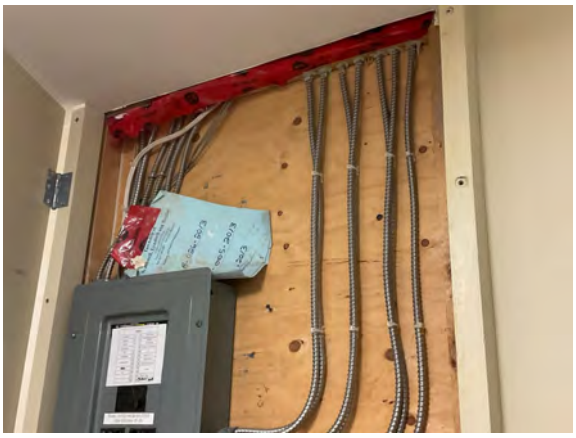
Description

The building branch wiring consists of insulated copper wire in rigid metal conduit and flexible armored cable. The wiring includes junction boxes, devices, switches and receptacles.

Condition Narrative

No significant deficiencies were observed or reported. Wiring was added for the 2013 addition. Replacement is not anticipated in the short term.

Photos



Township Office - D502001

Township Office - D502001

Township Office - D502001

Recommendations

Recommendations #1 - Branch Wiring and Devices	
Type	Life Cycle Replacement
Year	2063
Cost	$40,489.44

Element Description	
Name	D502002 - Interior Lighting - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$112.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$32,161.83

Description

The building interior lighting consists of a combination of linear light fixtures in offices , corridors, and pot light fixtures in lobbies and entrances. Linear fixtures appear to be T8. Pot light fixtures are CFL.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. Upgrade to LED should be considered.

Photos

Township Office - D502002

Township Office - D502002

Township Office - D502002

Township Office - D502002

Recommendations

Recommendations #1 - Interior Lighting	
Type	Life Cycle Replacement
Year	2048
Cost	$32,161.83

Element Description	
Name	D502041 - Exterior Lighting - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	9 Years
Renewal Year	2033
Quantity / Unit of Measure	2 / Each
Unit Cost	$574.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,562.36

Description

The building exterior lighting consists of wall-mounted fixtures along the perimeter of the building and canopy pot light fixtures at entrances. The wall fixtures are LED. The canopy fixtures are CFL.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D502041

Township Office - D502041

Recommendations

Recommendations #1 - Exterior Lighting	
Type	Life Cycle Replacement
Year	2033
Cost	$1,562.36

Element Description	
Name	D502051 - Exit Lighting - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	35 Years
Remaining Useful Life	24 Years
Renewal Year	2048
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$4.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,148.64

Description

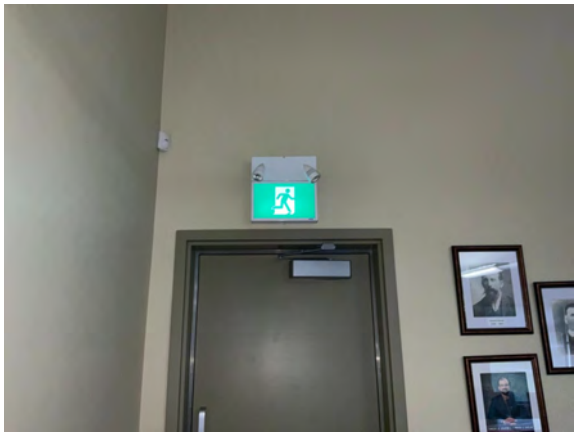
The building exit lighting consists of illuminated single-sided combination exit signs at exits.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D502051



Township Office - D502051

Township Office - D502051

Recommendations

Recommendations #1 - Exit Lighting	
Type	Life Cycle Replacement
Year	2048
Cost	$1,148.64

Element Description	
Name	D503008 - Intrusion Alarm Systems - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	9 Years
Renewal Year	2033
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$14.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$4,020.23

Description

The building intrusion alarm system consists of a master control panel, arming keypads, motion sensors, audible alarm devices, and shielded wiring. The control panel is located in the communications room and is interconnected with the access control system.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. Upgrade to LED should be considered.

Photos

Township Office - D503008

Township Office - D503008

Recommendations

Recommendations #1 - Intrusion Alarm Systems	
Type	Life Cycle Replacement
Year	2033
Cost	$4,020.23

Element Description	
Name	D503015 - Independent CO and Smoke Alarms - Administration
Installation Year	2021
Condition	2 - Good
Expected Useful Life	10 Years
Remaining Useful Life	7 Years
Renewal Year	2031
Quantity / Unit of Measure	1 / Each
Unit Cost	$230.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$313.02

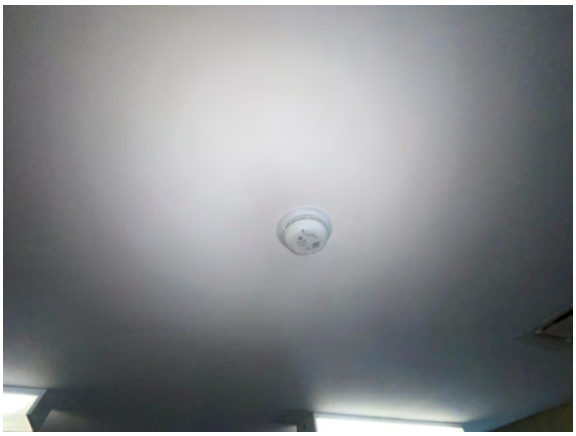
Description

The fire alarm system includes independent smoke and CO alarms located in the office.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos



Township Office - D503015

Recommendations

Recommendations #1 - Independent CO and Smoke Alarms	
Type	Life Cycle Replacement
Year	2031
Cost	$313.02

Element Description	
Name	D509003 - Emergency Lighting - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	9 Years
Renewal Year	2033
Quantity / Unit of Measure	211 / SM Building
Unit Cost	$6.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,722.96

Description

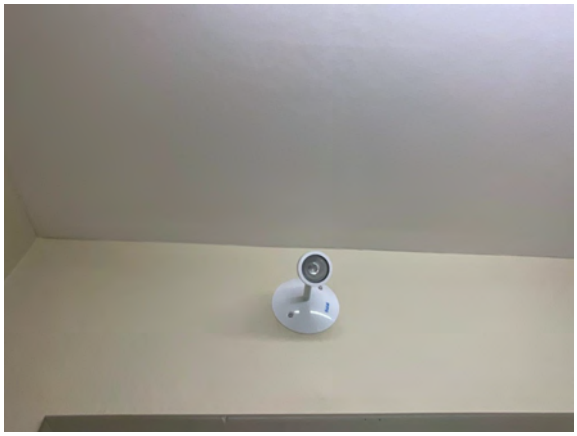
The building emergency lighting consists of wall mounted emergency central battery unit with local and remote quartz light heads. The system includes battery units, light heads, and wiring.

Condition Narrative

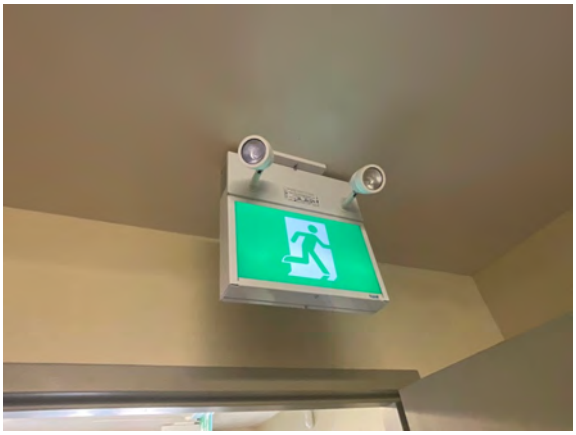
No significant deficiencies were observed or reported. Replacement is not anticipated in the short term. Upgrade to LED should be considered.

Photos

Township Office - D509003



Township Office - D509003



Township Office - D509003

Recommendations

Recommendations #1 - Emergency Lighting	
Type	Life Cycle Replacement
Year	2033
Cost	$1,722.96

Element Description	
Name	D509012 - Emergency Power Generator Systems - Natural Gas - Administration
Installation Year	2020
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	12 Years
Renewal Year	2036
Quantity / Unit of Measure	22 / kVA
Unit Cost	$754.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$22,575.34

Description

The emergency power generator system consists of an indoor propane-fired generator. The system includes the generator, radiator, air intake, exhaust muffler, stack, battery charger, and control panel. The generator is located outside the Southside office.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D509012

Township Office - D509012

Township Office - D509012

Recommendations

Recommendations #1 - Emergency Power Generator Systems - Natural Gas	
Type	Life Cycle Replacement
Year	2036
Cost	$22,575.34

Element Description	
Name	D509051 - Heat Trace Systems - Administration
Installation Year	2021
Condition	2 - Good
Expected Useful Life	20 Years
Remaining Useful Life	17 Years
Renewal Year	2041
Quantity / Unit of Measure	20 / LM
Unit Cost	$58.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,578.70

Description

The building heat trace system for the roof consists of the control panel and insulated wiring.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - D509051

Township Office - D509051

Recommendations

Recommendations #1 - Heat Trace Systems	
Type	Life Cycle Replacement
Year	2041
Cost	$1,578.70

G Building Sitework
G20 Site Improvements

Element Description	
Name	G202024 - Gravel Paved Surface - Parking Area - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	15 Years
Remaining Useful Life	5 Years
Renewal Year	2029
Quantity / Unit of Measure	400 / SM
Unit Cost	$32.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$17,420.08

Description

The parking located to the south of the building is gravel.

Condition Narrative

No significant deficiencies were observed or reported. Minor washboarding at isolated sections of the gravel paved surface should be repair as part of maintenance.

Photos

Township Office - G202024

Township Office - G202024

Recommendations

Recommendations #1 - Gravel Paved Surface - Parking Area	
Type	Life Cycle Replacement
Year	2029
Cost	$17,420.08

Element Description	
Name	G203022 - Concrete Paved Surfaces - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	30 Years
Remaining Useful Life	19 Years
Renewal Year	2043
Quantity / Unit of Measure	6 / SM
Unit Cost	$208.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$1,698.46

Description

Concrete paved walkways are provided to the backyard of the building.

Condition Narrative

No significant deficiencies were observed or reported.

Photos

Township Office - G203022

Recommendations

Recommendations #1 - Concrete Paved Surfaces	
Type	Life Cycle Replacement
Year	2043
Cost	$1,698.46

G30 Site Mechanical Utilities

Element Description	
Name	G301001 - Well Systems - Administration
Installation Year	1994
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	20 Years
Renewal Year	2044
Quantity / Unit of Measure	1 / Each
Unit Cost	$127,770.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$173,887.81

Description

The site includes a drilled well for water supply from an aquifer with rec centre. The well is assumed to consist of a metal casing with a well screen and drop pipe for the submersible pump.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.
Note: no photo available

Recommendations

Recommendations #1 - Well Systems	
Type	Life Cycle Replacement
Year	2044
Cost	$173,887.81

Element Description	
Name	G302016 - Septic Tank - 4000 Gallons - Administration
Installation Year	2013
Condition	2 - Good
Expected Useful Life	50 Years
Remaining Useful Life	39 Years
Renewal Year	2063
Quantity / Unit of Measure	1 / Each
Unit Cost	$37,620.00
Difficulty / Regional / Soft Cost / Replacement	1.00 / 1.04688 / 1.30000 / 1.0000
Element Cost	$51,198.71

Description

The building site includes a septic system comprising an underground concrete septic tank presumably connected to a drain field.

Condition Narrative

No significant deficiencies were observed or reported. Replacement is not anticipated in the short term.

Photos

Township Office - G302016