



1 James Street, Walkerton, Ontario

Prepared for:

Corporation of the Municipality of Brockton Box 68, 100 Scott Street, Walkerton, ON

Attention: Mr. Michael Murphy
Acting Director of Parks and Recreation

July 31, 2019

Pinchin Ltd. File: 238064





Issued to: Corporation of the Municipality of Brockton

Contact: Mr. Michael Murphy

**Acting Director of Parks and Recreation** 

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#### **EXECUTIVE SUMMARY**

Pinchin Ltd. (Pinchin) was retained by Mr. Michael Murphy of the Corporation of the Municipality of Brockton (Client) to conduct a Building Condition Assessment (BCA), subject to the limitations outlined in Section 6.0 of this report. As discussed with the Client this service did not include any specialist review of items such as mechanical/electrical systems, structural components, etc. The municipal address for the property is 1 James Street, Walkerton, Ontario (the Site). Natalie Tupper of Pinchin, conducted a visual assessment of the Site on May 22, 2019, at which time Pinchin interviewed and was accompanied by Mr. Rick Reich, Facility Attendant of the Site for approximately 18 years (hereafter referred to as the Site Representative).

Pinchin was advised by the Client that the purpose of the BCA was to understand the condition and performance of the Site Building and Site components as well as provide a capital forecast for a 10-year period. The primary purpose of this assessment is to evaluate the Site and forecast projects and costing for the next 10 years that maintains its current operational standards. It is assumed that the projects are completed like-for-like and do not include upgrades to the facilities. This assessment is to maintain the present functional standards of today and does not encompass the municipalities' future functionality standards as they may differ from the present.

The Site is an irregular shaped property approximately 11.05 acres in area. The Site is occupied by a single storey building used as the changeroom, washroom and mechanical building for the pool area (the Site Building). The main pool site building has a footprint of 2,615ft² and was constructed in 1981. There are two additional out-buildings including an open-air pavilion and a washroom building near the splash pad. The splash pad and tennis court were reviewed as part of the Site. As discussed, the playground equipment was not apart of the review.

The Site Building substructure is constructed with a cast-in-place concrete slab-on-grade with concrete block masonry walls. The superstructure of the Site Building is comprised of loadbearing concrete block masonry walls and a steel frame structure (steel beams, open webbed steel joists (OWSJ)), and a steel roof deck.

The exterior walls of the Site Building are clad with split faced architectural concrete block masonry walls at all elevations. There are asphalt paved parking areas and driveways on the south portion of the Site. The tennis court (coated asphalt) is located on the southwest portion of the Site, while the pavilion and splash pad are located on the northeast portion of the Site. The washrooms are located to the south of the splash pad.

The Site appears to be in overall satisfactory condition.



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The assessment did not reveal any visual evidence of major structural failures, soil erosion or differential settlement.

No immediate repair costs are required. Repair requirements (under replacement reserves) over the term of the analysis (i.e., 10 years) of \$411,430 have been identified. As noted during the Site visit, deficiencies relating to the roof systems, wall systems, interior finishes, Site features, mechanical systems were noted. Of particular note, recommendations, repairs and replacements for the following items are included throughout the term of the analysis:

#### **Roof Systems:**

- Replacement of the Built-Up asphalt Roof (BUR) system serving the Site Building as it has passed its Projected Useful Life (PUL) and is in poor condition;
- Installation of missing roof drain strainers on the BUR system;
- Installation of splash pads below perimeter downspouts at the pavilion outbuilding;
- Miscellaneous repairs and maintenance items to the roof systems including clearing of roof drain strainers, cleaning of the roof system, removal of debris, etc.

#### **Building Envelope:**

- Repoint the isolated areas of deteriorated mortar at the concrete block masonry walls at the main Site Building;
- Replacement of six original single glazed (SG) window units at the east elevation of the Site Building;
- Comprehensive replacement of all exterior sealants on the Site Building (i.e., windows, doors, control joints, roof penetrations, wall penetrations, etc.);
- Cleaning and repainting of the corroded exterior doors and/or door frames.

#### **Structural Elements:**

- Further review by a Structural Engineer to determine the overall section loss of the corroded areas of steel roof decking and structure within the Site Building.
- Repair and repaint areas of the steel roof deck where corrosion is present.

#### **Interior Finishes:**

 Miscellaneous repairs throughout the Site including sandblasting and repainting, pressure washing of concrete slabs, repairs to deteriorated concrete slab, repainting of wood benches, etc.

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#### Site Features:

- Repaving of the asphalt surfaced parking areas and walkways throughout the Site within the latter portion of the term;
- Resurfacing of the hard-court concrete tennis court that is deteriorated with cracking and fading throughout;
- Cyclical repairs of the asphalt and concrete systems throughout the term of analysis to eliminate trip hazards and seasonal deterioration.

#### **Outdoor Pool:**

- Replacement of the natural gas-fired heating boiler as it has reached its project useful service life
- Replacement of the vacuum pump and filter pump as it has reached its projected useful service life.
- Cyclical repairs of the concrete pads surrounding the pool area throughout the term of analysis to eliminate trip hazards and seasonal movement and deterioration.
- An allowance to replace any pool amenities including diving boards, fixtures, pool signage and painting to comply with any updated pool regulation requirements.
- The municipality has informed Pinchin they are undertaking a repair of the surrounding pool tile to replace the tile with parged concrete. We have incorporated this cost in our assessment.

#### **Mechanical Systems:**

- Replacement of one Domestic Hot Water (DHW) unit as it has reached its projected useful service life;
- Replacement of one DHW storage tank as it has reached its projected useful service life.

#### **Electrical Systems:**

Infrared scan of the electrical panels and distributions.

#### **Fire Suppression**

Installation of additional fire extinguisher at the outbuilding should be completed.

Consideration has been given regarding required ongoing maintenance and repairs of the major elements and at the direction of the Client, Pinchin has utilized a threshold of \$5,000 per system, per year as a limit in determining and carrying anticipated expenditures.

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Anticipated expenditures associated with maintenance and reparation of the major components below the threshold are carried within the annual operating budget and excluded from the Summary of Anticipated Expenditures.

Repair costs for the aforementioned items have been included over the term of the analysis (i.e., 10 years) included within Appendix I. The specific deficiencies identified during the BCA and their associated recommendations for repair are described in the main body of the report. These deficiencies should be corrected as part of routine maintenance unless otherwise stated within the report. Costs associated with desired upgrades have not been carried. Regular maintenance should be conducted on the roof systems, wall systems, structural elements, interior finishes, Site features and the mechanical/electrical systems to ensure that the projected useful life (PUL) of the major components is realized.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.



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## **APPENDICES**

APPENDIX I Table 1 – Summary of Anticipated Expenditures



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#### 1.0 INTRODUCTION

Pinchin Ltd. (Pinchin) was retained by Mr. Michael Murphy of the Corporation of the Municipality of Brockton (Client) to conduct a Building Condition Assessment (BCA), subject to the limitations outlined in Section 6.0 of this report. As discussed with the Client this service did not include any specialist review of items such as mechanical/electrical systems, structural components, etc. The municipal address for the property is 1 James Street, Walkerton, Ontario (the Site). Natalie Tupper of Pinchin, conducted a visual assessment of the Site on May 22, 2019, at which time Pinchin interviewed and was accompanied by Mr. Rick Reich, Facility Attendant of the Site for approximately 18 years (hereafter referred to as the Site Representative).

Pinchin was advised by the Client that the purpose of the BCA was to understand the condition and performance of the Site Building and Site components as well as provide a capital forecast for a 10-year period.

The Client has advised Pinchin that no previous Building Condition Assessments or other building reports have been prepared for the Site.

It was reported to Pinchin that the costs associated with ongoing general maintenance of the major components of the Site Building are carried as part of the annual operating budget for the Site. At the direction of the Client a threshold of \$5,000 per system, per year has been utilized in determining anticipated expenditures. Anticipated expenditures associated with maintenance and reparation of the major components below the threshold are reported to be carried within the annual operating budget and excluded from the Summary of Anticipated Expenditures. The term of analysis requested by the Client was 10 years.

The results of the BCA are presented in the following report. This report is subject to the Terms and Limitations discussed in Section 6.0.

#### 2.0 SCOPE AND METHODOLOGY

The scope of the BCA included a visual examination (without any intrusive testing or demolition of finishes to observe hidden areas) of the following components associated with the subject property:

- Architectural (including interior finishes readily visible in accessible areas of the building);
- Exterior walls:
- Windows, doors, sealants;
- Roof system;
- Structural;



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- Mechanical;
- Electrical:
- Fire/life safety; and
- Exterior Site features (asphalt pavements, concrete sidewalks, concrete curbs, landscaping, and fencing).

#### The BCA will also include the following:

- Review of general documentation on the repair/maintenance history of the elements, if available:
- Cursory review of previous reports and/or drawings pertaining to the Site Building, if available;
- Interviews and discussions with on-Site personnel regarding the repair/maintenance conducted on the Site Building or to determine any known deficiencies which may not be obvious (note that this is an important component of this work and the absence of the Site personnel will be noted if they are not available); and
- Photographic documentation of various components and observed deficiencies.

#### The report provides:

- A basic description of each of the various major components of the Site Building;
- A list of deficiencies noted with respect to the components examined; and
- Recommendations and cost estimates for the corrections recommended.

Cost estimates provided in this report are preliminary Class "D" and provided only as an indication of the order of magnitude of the remedial work. These values have been arrived at by determining a representative quantity from the visual observations made at the time of our Site visit and by applying current market value unit costs to such quantities and or a reasonable lump sum allowance for the work. More precise cost estimates would require more detailed investigation to define the scope of work. They are not intended to warrant that the final costs will not exceed these amounts or that all costs are covered. The estimates assume the work is performed at one time and do not include costs for potential de-mobilization and re-mobilization if repairs/replacement are spread out over the term of analysis. An appendix consisting of a table entitled "Summary of Anticipated Expenditures" for a period of 10 years (or as otherwise indicated by Client, prior to commencement of the project) with a threshold cost of \$5,000.00, outlining reserve costs, is included.



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All costs are identified in 2019 Canadian Dollars, and do not include consulting fees or applicable taxes. (For consulting fees, Pinchin typically recommends a budget allowance of 10% to 15% of the costs identified).

All cost estimates assume that regular annual maintenance and repairs will be performed to all building elements at the facility. No cost allowance is carried for this regular maintenance.

The cost estimates provided in this report are based on costs of past repairs at similar buildings, recent costing data such as "RS Means Repair and Remodelling Cost Data – Commercial/Residential", "Hanscomb's Yardsticks for Costing", and Pinchin's professional judgment.

Unless otherwise stated, the replacement costs identified for an element reflects the cost to remove and replace the existing element with the same type of element.

#### 3.0 OBSERVATIONS AND COMMENTS

#### 3.1 Site Information



General view of the South elevation of the Site Building.



General view of the East elevation of the Site Building.



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General view of the West elevation of the Site Building.



General view of the splash pad serving the Site.



General view of the splash pad washrooms/outbuilding serving the Site.



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General view of the pool serving the Site.



General view of the tennis court serving the Site.

Table 3.1 – Site Information

Site Occupant/Name	Centennial Pool Facility		
Site Address	1 James Street, Walkerton, Ontario		
Existing Land Use Type	Commercial	Primary On-Site Activity	Pool Facility
Multi-Tenant/Single Occupant	Single	Number of Units	One
Date First Developed	Unknown	Site Area	11.05 acres
Number of Buildings	One plus two outbuildings	Building Footprint Area(s)	~ 2,615 ft <sup>2</sup>
Number of Stories above grade	One	Total leasable Building Area(s)	N/A
Date Building(s) Constructed	~ 1981	Area of Tenant Spaces	N/A
Date Building(s) Renovated	N/A	Basement and/or U/G Parking	None

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Table 3.1 – Site Information

Site Occupant/Name	Centennial Pool Facility			
Site Address	1 James Street, Walkerton, Ontario			
Type of Roof System(s)	Built-Up asphalt Roof (BUR) Sloped metal	Number of Levels U/G	None	
Type of Wall Cladding	Concrete block masonry Split-faced architectural concrete block masonry	Area of Roof System(s)	BUR ~ 2,615 ft <sup>2</sup> Pavilion sloped metal roof ~ 2,600 ft <sup>2</sup> Splash pad outbuilding sloped metal roof ~ 400 ft <sup>2</sup>	
Type of Doors	Metal doors within metal frames complete with single glazed (SG) inserts Metal doors within metal frames	Types of Windows	Fixed SG units within metal frames	
Above Grade Parking Area	Yes	Electrical Source	Hydro One	
Surface Type	Concrete walkways, asphalt paving, landscaping.	Type of Heating/Cooling	N/A	

## 3.2 Roof Systems

The roof system of the Site Building consists of a conventionally designed, "near-flat" Built-Up asphalt Roof (BUR) system installed atop a layer of rigid insulation, atop metal roof decks. Neither the presence of a vapour barrier, nor the type or the thickness of the insulation could be verified, as the scope of the work did not include destructive testing. The total area of the BUR roof system is similar to the footprint area of the Site Building at approximately 2,615 ft². Built-in access is not provided for the roof system. The roof was accessed via an extension ladder.

The age of the BUR system was unknown, however based on its condition it was estimated to be approximately 20+ years old and original to construction. Drainage of the BUR system is provided by internal roof drains which presumably drain to the municipal sewer system. The BUR areas were observed to be in generally fair condition. There were no active leaks reported or observed during our site visit, however corrosion was noted at the underside of the metal roof deck.

In addition, sloped metal canopy roof systems were noted serving the pavilion outbuilding as well as the splash pad outbuilding at approximately 2,600 ft<sup>2</sup> and 400 ft<sup>2</sup> respectively. The sloped metal roof systems



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are reportedly approximately 5 to 10 years old. Drainage of the pavilion roof systems is provided by perimeter eavestroughs and downspouts which discharge at grade level, while drainage of the splash pad outbuilding is via natural runoff. The sloped metal roofs were reviewed from grade level as well as from the main Site Building.

Table 3.2 outlines the findings of the inspection of the roof systems:

Table 3.2 – Roof Systems			
Findings	Remarks/Recommendations		
Major Deficiencies/Findings			
The BUR system on the site building is approximately 20+ years old and appears to have reached the end of its Projected Useful Life (PUL).	Pinchin has carried an allowance for replacement of the BUR system within the term.		
Minor Deficiencies/Findings			
Organic growth was noted throughout the BUR membrane.	Clean the roof membrane as part of regular maintenance.		
<ul> <li>The sealants serving the perimeter roof flashing were noted to be deteriorated.</li> </ul>	Replace the sealants. (included in envelope section)		
Debris was noted atop the BUR system.	Remove the debris to prevent damage to the roof membrane.		
<ul> <li>Missing roof drain strainers were noted atop the BUR system.</li> </ul>	Replace the missing roof drain strainers.		
<ul> <li>A damaged downspout was noted at the pavilion outbuilding.</li> </ul>	Repair the damaged downspout and provide a splash pad.		



General view of the BUR system serving the Site Building.



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View of the sloped metal roof serving the pavilion outbuilding.



View of the sloped metal roof serving the splash pad outbuilding.



View of debris noted atop the BUR system at the Site Building.



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View of deteriorated sealants noted at perimeter metal flashing.



View of a missing roof drain strainer atop the BUR system.



View of corrosion noted at the underside of the metal roof deck serving the Site Building.



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View of a damaged downspout noted at the pavilion outbuilding.

The Projected Useful Life (PUL) of a BUR system is typically 20 to 25 years, while the PUL of a metal roof system ranges between 25 to 35 years and beyond, depending on the quality of the building materials used, efficiency of drainage, the quality of workmanship during installation and the level to which the roof system has been maintained.

The BUR system is approximately 20+ years old and will reach its PUL within the term of analysis. As such, Pinchin has carried an allowance for replacement of the BUR system within the mid portion of the term. In addition, due to the areas of corrosion at the underside of the metal roof decking, a Structural Engineer should be retained to determine the overall section loss of the steel components when recoating from the underside. This project has been included in the structural section.

The sloped metal roof systems appear to be in satisfactory condition. Repairs to the damaged downspout should be completed as part of regular maintenance.

It is recommended to clean vegetation growth atop the roof systems as well as remove debris at roof drains on a seasonal basis as part of regular maintenance. Any miscellaneous debris should also be removed to prevent damage to the roofing systems. Annual walk-on inspections are recommended as part of regular maintenance to ensure the integrity of the roof systems and to extend their service life.

#### 3.2.1 Skylights

The Site Building does not possess Skylight assemblies.

## 3.3 Building Envelope

#### 3.3.1 Exterior Cladding

The exterior walls of the Site Building are clad with split faced architectural concrete block masonry at all elevations. Concrete block masonry walls were noted serving the splash pad outbuilding.



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The mortar was noted to generally be in satisfactory condition with localized areas of deteriorated mortar that will require repointing. Localized areas of staining were also noted.

We have included a localized repair allowance for the wall systems for completing repointing, removing staining and miscellaneous repairs to the cladding.



General view of the exterior wall systems.



View of the wall systems serving the splash pad outbuilding.



View of cracked mortar noted at the northwest portion of the Site Building.



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#### 3.3.2 Windows

The window assemblies of the Site Building consist of fixed single glazed (SG) units within metal frames. The exact age and condition could not be confirmed; however, these units appear to be original to construction in 1981 (i.e., ~ 38 years old). The window assemblies are set within punched openings and are located on the east elevation. The windows appeared to be in generally poor condition with missing sealants, peeling paint, and corrosion at the window frames. The outbuildings do not possess window systems. Window assemblies will typically have a service life in the order of 30 to 35 years provided that regular maintenance is carried out as required.

Pinchin recommends replacement of the original windows within the term. An allowance to replace the windows is included. No other major expenditures related to the window assemblies are expected to be required within the term of this analysis.



General view of the original window units serving the east elevation of the Site Building.



General view of the typical corrosion and peeling paint noted at the window frames.

#### 3.3.3 Exterior Doors

The entrance door of the Site Building is located at the east elevation and consists of a hollow metal door within a metal frame, complete with solid glass inserts. Metal doors within metal frames also serve the



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secondary entrances and exits to the change rooms and mechanical areas. The secondary metal doors are located on the north, east and west elevations. The main entrance door and the maintenance doors swing outward while the change rooms doors swing inward.

Doors serving the splash pad outbuilding consist of insulated metal doors within metal frames. These doors were noted to be soft close and swing inward.

The exterior doors of the Site Building appeared to be in fair condition with peeling paint and surface corrosion noted at the base of the door frames in isolated areas. Doors at the splash pad outbuilding appeared to be in good condition. It is recommended to sand and repaint the deteriorated areas as part of regular maintenance.

Replacement of the door assemblies is not anticipated to be required within the term of this analysis.



View of the east entrance doors.



View of the splash pad outbuilding doors.



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View of corrosion noted at a door.



View of the door serving the mechanical area.

#### 3.3.4 Sealants

Sealants are provided along the perimeters of the windows, doors, at roof penetrations, and at joints of dissimilar cladding materials. The sealant materials are estimated to be of varying ages ranging from original to construction to recent repairs. Overall the building joint sealants were observed to be in generally poor condition, while sealants at the splash pad outbuilding were in good condition.

Sealants at the Site Building were observed to be deteriorated, debonded from the substrate, split, cracked, and missing in isolated locations.

A short-term comprehensive replacement of the sealants throughout the Site Building is recommended and falls below the reporting threshold. Sealant materials should be checked annually for pliability and cracking as part of a preventative maintenance plan.



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View of deteriorated sealants atop the perimeter roof flashing.



View of deteriorated sealants atop the perimeter roof flashing.



View of missing sealant noted at the SG window systems.



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View of deteriorated sealants noted at a wall vent.

Table 3.3 outlines the findings of the inspection of the Building Envelope systems:

Table 3.3 – Building Envelope			
Findings	Remarks/Recommendations		
Major Deficiencies/Findings			
Isolated areas of mortar at the concrete block masonry walls were noted to be deteriorated.	Repoint the mortar throughout the Site Building as needed.		
<ul> <li>The SG window units serving the east portion of the Site Building have reached their PUL.</li> </ul>	Replace the SG window units.		
<ul> <li>The majority of the perimeter sealants serving the main Site Building (i.e., wall penetrations, windows, doors, roof penetrations, joints, etc.) were noted to be deteriorated and/or missing.</li> </ul>	Pinchin recommends comprehensive replacement of the perimeter sealants.		
Minor Deficiencies/Findings			
Peeling paint and corrosion was noted at the secondary doors.	Sand blasting and repainting is recommended within the term.		

The wall, window and door systems of the Site Buildings were generally noted to be in satisfactory condition at the time of the Site visit with the above noted deficiencies.

Pinchin has attempted to identify and quantify the deficiencies associated with the wall, window and door systems however an investigation of the components should be completed prior to the repair work and to ensure the extent of deterioration is fully understood. It is noted that the cost estimates provided in this report are preliminary and provided only as an indication of the order of magnitude of the remedial work. More precise cost estimates would require more detailed investigation to define the scope of work. Superficial or visual signs of concrete or structural deterioration may indicate the need for extensive

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repairs which can only be estimated by performing a detailed investigation of the structure and the structural design.

Typical buildings of this age may contain PCBs in mastics, caulking and window putties. Testing for the presence of PCBs in these materials is beyond the scope of this BCA report. The potential presence of PCBs in these materials could give rise to additional costs in future if extensive renovation requiring removal of these materials or demolition activities are undertaken at the Site. The extent of such potential issues could not be assessed as part of this BCA report.

#### 3.4 Structural Elements

As outlined in the scope of work, a visual assessment of the condition of the structural elements was carried out on the elements which were visible at the time of the inspection.

The Site Building substructure is constructed with a cast-in-place concrete slab-on-grade. The superstructure of the Site Building is comprised of loadbearing concrete block masonry walls and a steel frame structure (steel beams, open webbed steel joists (OWSJ)), and a steel roof deck.

No structural drawings were available to Pinchin for review.

Table 3.4 outlines the findings of the inspection of the Structural Elements:

Table 3.4 – Structural Elements			
Findings	Remarks/Recommendations		
Major Deficiencies/Findings			
Areas of corrosion were noted at the underside of the steel roof decking and steel columns.	Refinish and recoat the steel deck. During refinishing, a structural engineer should be retained to determine the section loss of the steel components and assess any repairs needed at that time.		
Minor Deficiencies/Findings			
• N/A	• N/A		



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View of the steel framed structure at the Site Building.



View of the underside of the steel decking with visible corrosion noted.



View of the underside of the steel decking with visible corrosion noted.



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View of corrosion noted at a steel column.

Assessment of the original or existing building design, compliance with prior or current Building Code or detection or comment upon concealed structural deficiencies are outside the scope of work. Accordingly, the findings are limited to the extent that the assessment has been made based on a walk-through visual inspection of accessible areas of the structure.

Pinchin's visual review of the structural elements and information provided by the Site Representative indicated that no other major deterioration existed within the visibly accessible components of the Site Building apart from the corrosion. Pinchin recommends a Structural Engineer review the amount of section loss from previous repairs at the next recoating instance to further investigate the condition of the steel elements of the Site Building if any repairs/reinforcement is required.

#### 3.5 Interior Finishes

As outlined in the scope of work, the interior finishes of the Site Building were reviewed during the Site assessment.

The floor finishes within the Site Building consists of sealed cast-in-place concrete floor slabs throughout with areas of exposed cast-in-place concrete floor slab within the mechanical/electrical areas. Flooring within the pavilion and splash pad outbuildings was noted to consist of exposed cast-in-place concrete slab-on-grade.

The wall finishes within the Site Building consist primarily of painted concrete block masonry walls throughout. Areas of ceramic wall tiles were noted within the shower areas. Exposed concrete block masonry walls were noted within the mechanical/electrical areas as well as within the splash pad outbuilding.

The ceiling finishes within the Site Building primarily consist of exposed steel framed structure throughout. The ceiling within the splash pad outbuilding was noted to consist of corrugated metal.



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The Site Building contains women's and men's washrooms and changerooms complete with showers, a mechanical/electrical area, and a common space/office area. The pavilion was noted to be open air space. The splash pad outbuilding was noted to have a men's and women's washroom, as well as a mechanical/electrical area. The bathroom finishes consist of ceramic sinks, as well as ceramic wall-mounted urinals and/or floor-mounted flush toilets. Stainless steel taps were noted serving the washrooms and showers. The change rooms are complete with painted wood benches.

Table 3.5 outlines the findings of the inspection of the Interior Finishes:

Table 3.5 – Interior Finishes			
Findings		Remarks/Recommendations	
Major Deficiencies/Findings			
•	As discussed with the Site Representative dated finishes were noted. Pinchin has included an allowance for site building upkeep.	<ul> <li>Pinchin has included an allowance to update site finishes (showers, deteriorated fixtures, floor finishes, etc.) on an as needed basis at the site building interior at the mid term of the study.</li> </ul>	
Minor Deficiencies/Findings			
•	Peeling paint and corrosion was noted at the underside of the steel roof decking serving the Site Building.	This has been addressed in the Structural Section of this report.	
•	Staining at the cast-in-place concrete slab was noted within the washroom areas of the	<ul> <li>Pressure wash and clean the concrete floor slabs.</li> </ul>	



splash pad outbuilding.

General view of the interior finishes within the changerooms of the Site Building.



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General view of the interior finishes within the shower areas of the Site Building.



View of the finishes within the common/office area of the Site Building.



View of the finishes within the mechanical area of the splash pad outbuilding.



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View of the finishes within the mechanical area of the Site Building.



View of corrosion noted at the underside of the steel decking of the Site Building.



View of peeling paint noted at the underside of the steel decking of the Site Building.



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View of staining at the cast-in-place concrete slab noted within the washroom spaces of the splash pad outbuilding.

The interior finishes within the Site Building were generally observed to be in satisfactory condition with the exception of the above referenced deficiencies. Pinchin recommends that the above referenced deficiencies be addressed as part of regular maintenance and that regular annual maintenance of the interior finishes be performed throughout the term of the analysis.

## 3.6 Elevator Systems

The Site Building does not possess an elevator system.

Table 3.6 outlines the findings of the inspection of the elevator systems:

Table 3.6 – Elevator Systems			
Findings	Remarks/Recommendations		
Major Deficiencies/Findings			
• N/A	N/A		
Minor Deficiencies/Findings			
• N/A	• N/A		

#### 3.7 Site Features

The Site Building occupies approximately 1% of the 11.05 11.05 acre Site. The remainder of the Site is surfaced with soft landscaping (e.g., grassed areas with trees) and parking areas surfaced with asphalt pavements. A wood framed pavilion outbuilding was noted on the northeast portion of the Site, while a concrete block splash pad outbuilding was noted on the central portion of the Site.

The Site Building has paved asphalt parking areas at the upper south portion of the Site near the tennis courts, as well as additional lower parking down an access driveway towards the main Site Building in the central portion of the Site.

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Drainage of the Site pavements is provided by natural grade to an on-site stream which runs through the center of the Site and reportedly to an off-Site drainage area. Since the inspection was limited to visible areas no examination of any catch basins was performed and no review of the initial compliance with code was performed. The inspection of underground or concealed components is outside the scope of work. No issues were reported with the Sites drainage abilities.

A tennis court was noted on the southwest portion of the Site. The tennis court was noted to be comprised of an acrylic surfaced asphalt based hard court system. The tennis area is complete with two playing courts. Metal posts and netting are present at the playing areas. Chain link fencing was noted to surround the perimeter of the Site. The court was noted to be a pay-to-play system which powers the surrounding light poles. A total of six light poles were noted.

The exposed wood framed pavilion was noted on the northeast portion of the site complete with a cast-inplace concrete slab. Wood picnic tables are present throughout the pavilion. A jungle-gym area was noted adjacent to the pavilion. The jungle gym was noted to be steel and plastic construction surrounded by gravel surfaces.

A splash pad was noted on the east portion of the Site and consists of cast-in-place concrete pads with multiple nozzles that spray water onto the splash deck. Metal benches were noted surrounding the splash-pad. The mechanical system for the splash pad was noted in the adjacent concrete block outbuilding. A "Vortex" control system was noted within the outbuilding consisting of the main incoming water line breaking into six different lines controlled by six different pumps. The pumps are controlled by the "Vortex" control box. No problems were reported with the splash pad systems as it is reportedly approximately 5 years old.

Soft landscaping was noted throughout the Site and surrounding the Site Building on the north, south and west elevations. There are asphalt paved walkways noted throughout the Site joining the pavilion, splash pad areas, jungle gym, and main Site Building. Cast-in-place concrete walkways were noted at the main Site Building serving the pool areas. Cast-in-place concrete stairs complete with metal guardrails were noted at the southeast portion of the Site. A stream runs through the central portion of the Site. Wood and steel framed bridges were noted as water crossings (The review of bridge condition is not apart of this report). There is one entrance driveway to the Site from James Street on the south portion of the Site.



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General view of the asphalt paved parking areas on the lower, central portion of the Site.



View of the asphalt paved walkways noted throughout the Site.



View of the steel and wood framed bridge noted crossing the stream which flows across the centre of the Site. (Not included in assessment)



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View of the stream that flows through the central portion of the Site.



View of the cast-in-place concrete walkways noted adjacent to the main Site Building.



View of asphalt paved parking areas and driveway noted at the lower central portion of the Site.



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View of the asphalt driveway and metal gates noted at the main entrance to the Site.



View of the hard court tennis court.



View of the soft landscaping, chain link fencing and concrete walkways noted surrounding the outdoor pool.



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View of the jungle gym play area on the northeast portion of the Site. (Not included in assessment).



View of the pavilion outbuilding.



View of the splash pad serving the site.



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View of the "Vortex" mechanical system noted serving the splash pad.



View of deteriorated asphalt pavement walkway within the central portion of the Site.



View of cracking noted within the asphalt paved parking areas on the lower, central portion of the Site.



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View of typical damaged rubber acrylic base surface at the tennis court of the Site.



View of the steps serving the south portion of the Site.

Table 3.7 outlines the findings of the inspection of the Site features:

Table 3.7 – Site Features									
Findings	Remarks/Recommendations								
Major Deficiencies/Findings									
The tennis court surfacing was noted to be deteriorated and aged, with cracking and fading visible throughout.	Pinchin has carried an allowance to resurface the tennis court. We have used costs from previous repair instances within the budget.								
<ul> <li>Localized areas of deteriorating asphalt paved areas were noted within the central site walkways and the parking areas.</li> </ul>	Pinchin has carried an allowance for repaving of the asphalt pavements serving the Site within the latter portion of the term.								
Minor Deficiencies/Findings									
<ul> <li>Areas of overgrowth were noted within the cast-in-place concrete walkways and concrete elements of the Site.</li> </ul>	Remove overgrowth within the concrete elements as part of regular maintenance.								

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The Site features appear to be in satisfactory condition with the above referenced deficiencies. Pinchin has carried an allowance for repaving of the asphalt pavements within the latter portion of the term, as well as an allowance for resurfacing of the tennis court within the early portion of the term. Cyclical repairs to the remaining site elements can be managed below the reporting threshold. Pinchin recommends that regular annual maintenance of the Site features be performed throughout the term of the analysis. Assessment of or comment upon concealed deficiencies and any buried/concealed utilities or components are outside the scope of work.

#### 3.8 Outdoor Pool

The Site is equipped with an in-ground, outdoor pool located adjacent to the east elevation of the Site Building. The pool area was noted to be surrounded by metal chain link fencing and locking chain link gates. The pool is surrounded by cast-in-place concrete slabs-on-grade. The pool tiles at the upper potion of the pool were currently being removed and replaced during the time of the assessment. The pool was noted to have a shallow and a deep end. The deep end was noted to be 3.01 meters deep, complete with two diving boards (a 1-meter and a 3-meter diving board). One lifeguard tower is also present. A total of 5 metal access ladders and built in wall steps were noted at the perimeter of the pool. An access ramp complete with metal railings is present at the west portion of the pool.

The pool was noted to be a heated, gravity fed system treated by filters and disinfection systems. The water from the swimming pool is gravity fed to an in-ground tank within the mechanical room of the Site Building. The water passes through raw pollutant filters with perlite and soda ash (pH control) via a filter pump. The inground tank was not available for review.

The water is chemically treated by a chlorine gas system. The chlorine gas system comprises of chlorine storage tanks that are connected to a Wallace & Tiernan S10K remote vacuum system and injected into the water supply to treat the pool water. The Site Representative stated that this system is operating as intended.

The pool water is filtered with reusable filter screens that are manually removed and cleaned throughout the year. The water is circulated through these systems with a vacuum and filter pump. Both pumps appear to be original and have likely surpassed their project useful service life (PUL). Pinchin has added a project to replace these pumps however they are assumed to be below the cost threshold.

The pool storage room where the chlorine is located is equipped with a Wallace & Tiernan Acutec 35 gas detector. The Site Representative stated that this system is operating as intended.

The heating boiler (S# 05317522) serving the pool is a natural gas boiler with 1,235,600 BTU/HR output. The boiler appears to be original and has likely surpassed its PUL. Pinchin has included a project to replace this heating boiler in the early portion of the assessment term. In the mechanical room a



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SunTouch solar heating control box was noted. The Site Representative stated that this solar heating system was no longer in use. Pinchin noted that Switch #36 with a solar heater label was in the off position.

The Site Representiave informed us that regular maintenace is completed at the pool with recoating done on a cyclical basis and general maintenance preformed throughout the year. The muncipality is undertaking prevenative maintenance repairs to the perimeter of the pool by replacing tile with parged concrete. We have incorprated this cost into the study as requested.

Note that Pinchin has not completed a pool safety review as per R.R.O 1990, Reg. 565: Public Pools under the Health Protection and Promotion Act and assumes that the finishes are grandfathered from original construction. The city has expressed public safety concerns with the use of the high diving platform. We recommend that the diving platforms be reviewed to conform to the above safety standard even if finishes/fixtures may be grandfathered in from original construction. It is a prudent measure that pool fixtures such as older slides and high diving boards are removed for public safety, liabitity and due to ongoing cost of replacement/repair.

Table 3.8 outlines the findings of the inspection of the Outdoor Pool.

Ta	ble 3.8 – Outdoor Pool									
Fir	ndings	Remarks/Recommendations								
Ma	njor Deficiencies/Findings									
•	The natural gas-fired heating boiler serving the pool appears to be original and has surpassed its PUL.	Pinchin has carried an allowance for replacement of the heating boiler.								
•	The vacuum pump and filter pumps appear original and have likely surpassed their PUL.	<ul> <li>Pinchin recommends replacement of the two pumps.</li> </ul>								
Minor Deficiencies/Findings										
•	Minor corrosion was noted at the diving boards. They also appear to be aged. Safety concerns have been raised.	Clean and refinish the diving boards. Consider upgrading the diving platforms to conform to modern pool safety regulations.								
•	Minor concrete cracking and concrete deterioration is present.	<ul> <li>An allowance to complete repairs to the surrounding concrete as been included.</li> </ul>								
•	The exterior pool finishes including the ladders, diving boards, lifeguard towers are scheduled to be replaced in the latter portion of the study.	<ul> <li>Pinchin recommends that updated fixtures, boards, towers, are installed at the later portion of the study. Updates to signage and other modern standards can be completed at this time.</li> </ul>								



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View of the in-ground pool.



View of the ramp serving the in-ground pool.



View of the deep end of the in-ground pool.



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View of the two diving boards serving the deep end of the pool.



View of the in-ground water treatment tank noted serving the pool.

Note: Filters are currently removed for cleaning.



View of a typical metal ladder and steps serving the pool.



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View of the chlorine gas treatment system serving the pool.



View of the heating boiler serving the pool.



View of the vacuum pump serving the pool.



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View of the filter pump serving the pool.



View of the stored filters serving the pool.



View of minor corrosion noted at the base of the diving boards.

The Pool features appear to be in satisfactory condition with the exception of the above referenced deficiencies. Pinchin has carried an allowance for replacement of the heating boiler serving the pool. Replacement of the vacuum and filter pump is also anticipated. Refinishing or upgrading of pool fixtures should also be considered. Pinchin recommends that regular annual maintenance of the Pool features be performed throughout the term of the analysis. Assessment of or comment upon concealed deficiencies and any buried/concealed utilities or components are outside the scope of work.



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#### 3.9 Mechanical Systems

# 3.9.1 Plumbing Fixtures

Plumbing fixtures are present in the washroom and change room areas as well as the splash pad outbuilding washrooms. Washroom facilities contain manually operated floor and wall mounted toilets and counter mounted lavatories with manually operated tap sets. A stainless-steel sink complete with manually operated taps is provided for the emergency eye wash station.



View of a typical porcelain toilet in a washroom area.



View of porcelain sink with manually operated faucet in washroom area.



View of the stainless-steel sink serving the emergency eye wash station.



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The plumbing fixtures in the facility are of various ages and condition. No significant operational deficiencies were reported or observed at the time of the assessment that would exceed the threshold of the report. These styles of toilets, urinals, and lavatories typically have a Projected Useful Life (PUL) of 20 years or more.

Based on age and observed conditions, major expenditures beyond routine maintenance are not anticipated during the evaluation period. Ongoing replacement of plumbing fixtures can be conducted below the cost threshold of reporting.

#### 3.9.2 Domestic Cold Water (DCW) Distribution

The majority of the domestic water distribution is either concealed with pipe insulation, concealed behind interior finishes or encapsulated behind walls and floors. Where observed, the domestic water distribution was via copper and ABS pipes, with sink supply lines to faucets noted as braided flexible metal tubing with hot and cold shut off valves.



View of existing plumbing below a sink within a washroom.

No significant deficiencies were reported or observed at the time of the assessment. Based on age and observed conditions, no significant capital expenditures other than routine maintenance are anticipated during the evaluation period. However, careful monitoring, repair, and partial replacement should be considered. A cost has not been included.

## 3.9.3 Domestic Hot Water (DHW) Heaters

Domestic hot water (DHW) within the Site Buildings showers and washrooms is provided by one (1) natural gas-fired domestic hot water boiler complete with an insulated storage tank. The tank also serves the splash pad outbuilding washroom sinks. The DHW boiler was noted to be manufactured by "A.O. Smith" in 2011 (i.e., ~ 8 years old) and possess a capacity of 420,000 BTUH. The DHW boiler is complete with an insulated storage tank. The tank is reportedly from 1981 (i.e., ~ 38 years old) with 350-gal storage capacity.

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The DHW heating systems appear to be performing as intended. Based on age and observed condition of the DHW system, replacement of the DHW boiler and storage tank is anticipated within the term of analysis as it will attain its projected useful service life. Replacement of the storage tank will be required in the short term as it has reached its PUL. Replacement of the DHW unit has been carried in the cost table. Other major expenditures beyond regular maintenance are not anticipated during the term of analysis of this report.

## 3.9.4 Sanitary Waste

The Sanitary Waste is reportedly connected to the municipal sewer system. Since the assessment was limited to visible areas, no examination of the system was performed and no review of the initial compliance with Code was performed. The assessment of underground or concealed components is outside the scope of work.

The majority of the sanitary and storm waste system is either concealed behind interior finishes or encapsulated behind walls and floors. Due to the concealed nature of the sanitary system the condition could not be verified. The lavatory drain pipes are chrome plated metal.



Typical roof drain missing roof drain strainer.

Copper drain waste and vent piping typically has a PUL of 35-40 years. Cast iron drainage piping typically has a PUL of 40-50 years.

It appears the sanitary and storm waste systems are working as intended, and there were no reported problems occurring at the facility in occupied areas. However, it is strongly recommended that the water lines are power flushed and scoped with a video camera to determine the actual condition. Allowances have not been provided to replace the sanitary and storm water removal systems during the term of analysis.



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The flat roof is drained by a series of roof drains connected to interior rain leaders. We recommend biannual roof inspections to make sure the roof drain flashings are watertight, and the strainers are not clogged with debris or missing. It is also recommended that the sewer lines be cleaned on a regular planned schedule of every 3-5 years.

### 3.9.6 Gas Supply System

Natural gas is distributed to the DHW units and boiler within the mechanical room.

No significant deficiencies were reported or observed at the time of the assessment.

Significant replacement of the gas supply system is not anticipated during the evaluation period. It is recommended that the gas lines be cleaned and painted on a regularly scheduled basis, as part of general maintenance.

No issues or concerns were expressed by the Site Representative at time of Site visit.



View of typical gas piping in the mechanical room.

#### 3.9.5 Heating, Ventilation, Air Conditioning (HVAC) Systems

There are reportedly no heating or cooling systems serving the Site Building or the outbuildings.

## 3.9.6 Exhaust Systems

The exhaust systems at the Site Building consists of various exhaust fans for the changerooms, showers, mechanical areas, washrooms, electrical rooms, and some common areas. The exhaust fans are vented to the atmosphere through the exterior walls or through the roof. The fans were observed to be in serviceable condition.



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View of the various rooftop exhaust units and vents.

Exhaust fans are known to have a PUL of 10-15 years but often can operate well past their PUL with regular maintenance and service work as required.

No significant deficiencies were reported or observed at the time of the assessment.

Table 3.9 outlines the findings of the inspection of the Mechanical Systems.

Table 3.9 – Mechanical Systems									
Findings	Remarks/Recommendations								
Major Deficiencies/Findings									
<ul> <li>The natural gas-fired heating boiler serving the pool appears to be original and has surpassed its PUL.</li> </ul>	Pinchin has carried an allowance for replacement of the heating boiler.								
<ul> <li>The vacuum pump and filter pumps appear original and have likely surpassed their PUL.</li> </ul>	Pinchin recommends replacement of the two pumps.								
Minor Deficiencies/Findings									
<ul> <li>The exhaust fans at the top of the Site Building have reached the end of their projected useful service lives.</li> </ul>	Pinchin recommends replacement of the exhaust fans within the report term.								

# 3.10 Electrical Systems

# 3.10.1 Main Electrical Service and Switchboards

The electrical power for the Site Building is reportedly supplied from an off-Site pole mounted transformer which feeds the main electrical room located in the mechanical room of the Site Building via overhead

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wires. The main electrical service for the Site consists of a 200 Ampere 120/208 Volt, 3 Phase 4 Wire service complete with a "Federal Pioneer" main disconnect switch.

The electrical systems were noted to be in serviceable condition at the time of the Site assessment. The main electrical disconnect switch was noted to be corroded. Pinchin has included an allowance to complete infrared scanning at all electrical systems on the site. Once reviewed, it is anticipated that the electrical switch may require replacement. Pinchin has included a project to replace the switch but it is anticipated that the replacement is below the threshold of the report.

Based on the age and observed conditions, it is recommended that an infrared scan of the electrical distribution system be completed annually as part of preventative maintenance program to check for any issues related to overloading, loose connections, or other related issues.



View of the main electrical disconnect noted within the Site Building.



View of an electrical panel within the splash pad outbuilding.

Based on age and observed conditions, major expenditures beyond normal maintenance are not anticipated during the term of analysis of this report.

#### 3.10.2 Lighting Equipment - Interior Lighting

The interior lighting was generally noted to consist of T8 fluorescent tube fixtures.



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The projected useful life of T8 lighting (specifically the ballasts) is 25,000 hours. The age of the existing lighting fixtures and lamps could not be confirmed.



Typical T8 fluorescent tube lighting fixtures within the splash pad outbuilding.



Typical T8 fluorescent tube lighting fixtures within the Site Building.

Pinchin recommends replacing the interior lighting at the end of its PUL. Also, the lights should be changed on a 4-year rotation to attempt to avoid bulb failure and multiple interruptions.

A provision to replace the interior lighting has not been included in the Cost Table as it falls below the reporting threshold and it is assumed this is covered by regular maintenance.

# 3.10.3 Lighting Equipment - Exterior Lighting

Exterior lighting consists of building-mounted lighting and pole mounted lighting. Exterior wall mounted lighting fixtures are installed at the splash pad outbuilding only. Pole mounted lighting was also present at the tennis court area, along the asphalt paved pathways, and at the pool area. The tennis court area is serviced by paid-per-hour light timing box. Pinchin has been informed that the light timers are in operable condition. The Site Representative has indicated to us that the lights and timer are being serviced under operations and we have not included a project to replace either as apart of this study.



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Typical pole mounted lighting at the pool area.



Typical wall-mounted exterior lighting on the splash pad outbuilding.



Typical pole mounted lighting at the tennis court area.



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Typical pole mounted lighting at the asphalt paved pathways.

Based on observed and reported conditions, major expenditures are not anticipated beyond routine maintenance and repair, during the term of analysis of this report.

Table 3.10 outlines the findings of the inspection of the Electrical Systems.

Table 3.10 – Electrical Systems									
Findings	Remarks/Recommendations								
Major Deficiencies/Findings									
• N/A	• N/A								
Minor Deficiencies/Findings									
Pinchin recommends annual inspection of the electrical systems with infrared scanning.	Based on information from the infrared scanning, an electrical switch located in the Site Building may need to be replaced. This item is anticipated to be below the threshold of the report.								

# 3.11 Fire Suppression

# 3.11.1 Sprinkler Systems

The Site Building does not possess a sprinkler system.

#### 3.11.2 Portable Fire Extinguishers

Fire protection in the Site Building is provided by wall-mounted chemically-charged ABC-class fire extinguishers located in strategic locations.

The fire extinguishers were generally noted to be charged to sufficient levels and possess inspection tags dated May 2018 by "Robson Extinguisher Service". The inspection dates were noted to be outdated, immediate re-inspection should be completed. An additional fire extinguisher should be provided at the outbuilding.

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Subsequent to Pinchin's site visit, the Brockton Fire Prevention Officer has indicated that the fire extinguisher inspection date has been updated.



View of fire extinguisher observed within the Site Building.

### 3.12 Fire Alarm and Life Safety

#### 3.12.1 Fire Alarm System and Detection

The Site Building does not possess a fire alarm or heat detector system.

Subsequent to Pinchin's site visit, the Brockton Fire Prevention Officer has indicated that fire alarms and detectors are not required at the main site building.

#### 3.12.2 Exit Signs

Illuminated emergency exit signage in the Site Building is provided by ceiling mounted hardwired and battery-powered units located above exit doors and directional exit signs in the required means of egress. The exit signs are generally visible on approach to the exit.

### 3.12.3 Emergency Lighting

Emergency lights within the Site Building consist of flood light units located strategically throughout. The emergency lighting units are hardwired, and battery powered. The emergency lighting units appear to satisfy and provide the required 30 minutes of emergency power.

#### 3.12.4 Fire Separation

Since no architectural drawing details were provided, the loadbearing wall and column assemblies are generally of unknown construction where not open to view. It is recommended to ensure that these components meet the minimum fire resistance ratings.



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#### 3.12.5 Egress and Path of Travel

Correct door swing direction and self-closing devices were not observed.

It is recommended to check and remove all obstructions from the path of travel to exits as part of regular housekeeping for fire and life safety. Pinchin noted that the facility is currently closed for the season and has not been opened for public access. Pinchin recommends during public access all paths of travel are always obstruction free.

### 3.12.6 Fire Safety Plan

A Fire Safety Plan was not prepared and readily available in the Site Building.

Subsequent to Pinchin's site visit, the Brockton Fire Prevention Officer has indicated that a Fire Safety Plan has been installed at the Site Building.



View of the typical illuminated exit signage noted within the Site Building.



View of the typical emergency lighting noted within the Site Building.



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Table 3.11 outlines the findings of the inspection of the Fire Alarm and Life Safety Systems.

Table 3.11 – Fire Alarm and Life Safety Systems									
Findings	Remarks/Recommendations								
Major Deficiencies/Findings									
Fire extinguisher is missing in mechanical room of outbuilding.	Installation of fire extinguisher in outbuilding mechanical room.								
Minor Deficiencies/Findings									
• N/A	• N/A								

#### 4.0 KNOWN VIOLATIONS OF CODE

It was reported to Pinchin by the Site Representative that no outstanding violations from the Building Department existed pertaining to the property.

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on Pinchin's review of the property, conducted on May 22, 2019, the Site Building appears to be in overall satisfactory and in comparable standing to other similar properties in the area. Based on our visual assessment, the Site Building appears to have been constructed in general accordance with standard building practices in place at the time of construction.

The assessment did not reveal any evidence of major structural failures, soil erosion or differential settlement.

As noted during the Site visit, deficiencies relating to the roof systems, wall systems, interior finishes, Site features, mechanical systems were noted. Of particular note, recommendations, repairs and replacements for the following major items are included throughout the term of the analysis:

#### **Roof Systems:**

- Replacement of the Built-Up asphalt Roof (BUR) system serving the Site Building as it has passed its Projected Useful Life (PUL) and is in poor condition;
- Installation of missing roof drain strainers on the BUR system;
- Installation of splash pads below perimeter downspouts at the pavilion outbuilding;
- Miscellaneous repairs and maintenance items to the roof systems including clearing of roof drain strainers, cleaning of the roof system, removal of debris, etc.

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#### **Building Envelope:**

- Repoint the isolated areas of deteriorated mortar at the concrete block masonry walls at the main Site Building;
- Replacement of six original single glazed (SG) window units at the east elevation of the Site Building;
- Comprehensive replacement of all exterior sealants on the Site Building (i.e., windows, doors, control joints, roof penetrations, wall penetrations, etc.);
- Cleaning and repainting of the corroded exterior doors and/or door frames.

#### Structural Elements:

- Further review by a Structural Engineer to determine the overall section loss of the corroded areas of steel roof decking and structure within the Site Building.
- Repair and repaint areas of the steel roof deck where corrosion is present.

#### Interior Finishes:

 Miscellaneous repairs throughout the Site including sandblasting and repainting, pressure washing of concrete slabs, repairs to deteriorated concrete slab, repainting of wood benches, etc.

#### Site Features:

- Repaving of the asphalt surfaced parking areas and walkways throughout the Site within the latter portion of the term;
- Resurfacing of the hard-court concrete tennis court that is deteriorated with cracking and fading throughout;
- Cyclical repairs of the asphalt and concrete systems throughout the term of analysis to eliminate trip hazards and seasonal deterioration.

#### **Outdoor Pool:**

- Replacement of the natural gas-fired heating boiler as it has reached its project useful service life.
- Replacement of the vacuum pump and filter pump as it has reached its projected useful service life.
- Cyclical repairs of the concrete pads surrounding the pool area throughout the term of analysis to eliminate trip hazards and seasonal movement and deterioration.

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- An allowance to replace any pool amenities including diving boards, fixtures, pool signage and painting to comply with any updated pool regulation requirements.
- The municipality has informed Pinchin they are undertaking a repair of the surrounding pool tile to replace the tile with parged concrete. We have incorporated this cost in our assessment.

#### **Mechanical Systems:**

- Replacement of one Domestic Hot Water (DHW) unit as it has reached its projected useful service life.
- Replacement of one DHW storage tank as it has reached its projected useful service life.

### **Electrical Systems:**

Infrared scan of the electrical panels and distributions.

#### **Fire Suppression**

Installation of additional fire extinguisher at the outbuilding should be completed.

Regular maintenance should be conducted on the roof systems, wall systems, structural elements, interior finishes, Site features and the mechanical/electrical systems to ensure that the PUL of the major components are realized. Repair costs for the aforementioned items have been included over the term of the analysis (i.e., 10 years) included within Appendix I. The specific deficiencies identified during the BCA and their associated recommendations for repair are described in the main body of the report. These deficiencies should be corrected as part of routine maintenance unless otherwise stated within the report. Costs associated with desired upgrades have not been carried.

#### 6.0 TERMS AND LIMITATIONS

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

In accordance with the proposed scope of work, no physical or destructive testing or design calculations were conducted on any of the components of the buildings. Assessment of the original or existing building design, or detection or comment upon concealed structural deficiencies and any buried/concealed utilities or components are outside the scope of work. Similarly, the assessment of any Post Tension reinforcing

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(if present) is not included in the scope of work. Determination of compliance with any Codes is beyond the scope of this Work. The Report has been completed in general conformance with the ASTM Designation: *E 2018 – 15 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process.* 

It should be noted that Pinchin has attempted to identify all the deficiencies required by this Standard associated with this project. Pinchin does not accept any liability for deficiencies that were not within the scope of the investigation.

The budget costs for remedial work for each specific item has been provided to the best of our ability and will provide an order of magnitude cost for the individual item and the overall possible remedial work. Our experience has shown that the costs that Pinchin have provided are appropriate and of reasonable accuracy for the purpose intended. It should be noted that the budget cost or reserve costs for any specific item may vary significantly based on the fact that the schedule or phasing of the future remedial work is unknown at this time and the impact on building operations of this remedial work is unknown at this time. If a more accurate, detailed or documented reserve cost is required at this time the Client should request Pinchin to provide an additional proposal to provide a more accurate cost estimate.

It should be noted that recommendations and estimates outlined in this report do not include allowances for future upgrading of components pertaining to Client or tenant fit-up that may be necessary or required by Authorities Having Jurisdiction (AHJ).

The assessment is based, in part, on information provided by others. Unless specifically noted, Pinchin has assumed that this information was correct and has relied on it in developing the conclusions.

It is possible that unexpected conditions may be encountered at the Site that have not been explored within the scope of this report. Should such an event occur, Pinchin should be notified in order to determine if we would recommend that modifications to the conclusions are necessary and to provide a cost estimate to update the report.

The inspection of the interior of boilers, pressure vessels, equipment, fan coils, ductwork or associated mechanical, etc., was beyond the scope of work. It should be noted that the heating and cooling duct work within the Site Building may contain interior insulation. The Site Representative was unaware of the presence of insulation within the duct work within the Site Building. It is Pinchin's experience that interior insulation within duct work is prone to deterioration or development of mould which may require removal of the insulation. In the case where interior insulation is present within the duct work, Pinchin recommends that the duct work insulation be inspected for the presence of mould. Pinchin did not complete test cuts into the roof assembly and did not review the presence of phenolic insulation.

Due to the concealed nature of the plumbing system the condition of the risers could not be verified.



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Environmental Audits or the identification of designated substances, hazardous materials, PCBs, insect/rodent infestation, concealed mould and indoor air quality are excluded from this BCA report.

Further to the aforementioned, determination of the presence of asbestos containing material within the building such as drywall joint compound or the lead content within the older paint finishes was beyond the scope of work.

This report presents an overview on issues of the building condition, reflecting Pinchin's best judgment using information reasonably available at the time of Pinchin's review and Site assessment. Pinchin has prepared this report using information understood to be factual and correct and Pinchin will not be responsible for conditions arising from information or facts that were concealed or not fully disclosed to Pinchin at the time of the Site assessment.

238064 FINAL BCA, 1 James Street, Walkerton, ON July 31, 2019.docx
Template: Master Report for Baseline PCA with Specialist Reviews Single Office Building, PCA, December 6, 2017



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APPENDIX I

Table 1 – Summary of Anticipated Expenditures

			Remaining									F	Replacement R	ment Reserve Costs						
ITEM	Projected	Effective	Projected	Quantity	Unit	Unit Cost	Total Cost	Immediate												
	Useful Life		Useful Life					Costs	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	1 - 10 Year	
	(yrs)	()/	(yrs)					00313	1 vr Cost	2 vr Cost	3 vr Cost	4 vr Cost	5 vr Cost	6 vr Cost	7 vr Cost	8 vr Cost	9 vr Cost	10 vr Cost	Total	
Life Safety, Consulting and ADA	()/		()/						i yi oost	2 yi 003t	3 yi 003t	4 yi 003t	3 yr 003t	0 yi Cost	7 yi 003t	o yi cost	3 yi 003t	10 yr 003t	Total	
Life Safety & Code Compliance	1			1				1	I											
Follow-up Recommendations																			i e	
General ADA Accessibility																			1	
		L	1			I	· ·			1	l l			1	1	I	I	I		
Table 3.2 - Roof Systems																				
Roof Structures and Roofing - BUR Replacement	20-25	20+	0-5	2,615	SF	\$22	\$57,530				\$57,530								\$57,530	
Roof Structures and Roofing - Install missing roof drain strainers, splash pads, maintenance items (Below Threshold)	Varies	Varies	Varies																\$0	
Table 3.3 - Building Envelope																				
Exterior Walls - Repairs	40-50	38	0-5	N/A	LS	\$5,000	\$5,000						\$5,000						\$5,000	
Exterior Windows - Repairs/Window Replacements	35-40	38	0-5	6	Units	\$900	\$5,400						\$5,400						\$5,400	
Exterior Walls - Exterior Sealant Replacement	15-20	38	0	N/A	LS	\$5,000	\$5,000			\$5,000									\$5,000	
Exterior Windows and Doors - Door Repairs and Re-Coating (Below Threshold)	Varies	Varies	Varies																\$0	
This are the second sec																				
Table 3.4 - Structural Elements	1/	\/i-	Maria						1	1	1			1	1	1	1	1	00	
Superstructure - Investigation by a Structural Engineer (Below Threshold)	Varies	Varies	Varies 3	NI/A	1.0	ØF 000	<b>AF 000</b>	1		<del>                                     </del>	ØF 000			<del>                                     </del>	<del> </del>	ļ	-	-	\$0	
Superstructure - Recoating underside of steel deck, structural repairs as necessary	15-20	Varies	3	N/A	LS	\$5,000	\$5,000	1	1	<u> </u>	\$5,000		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	\$5,000	
Table 3.5 - Elevator Systems																				
N/A		T	1	T T	I	1	I	T T	1	1	I I		I	1	1	I	1	1	\$0	
IVA			1	1				ı			l I								ΨΟ	
Table 3.6 - Interior Finishes																				
Interior Finishes - Misc. repairs and replacement on an as needed basis	Varies	Varies	Varies	1	LS	\$7,500	\$7.500	1					\$7,500		1			\$7.500	\$15,000	
						T.1000	7.,,			1	l l		7.1000	1	1	I	I	4.1000		
Table 3.7 - Site Features																				
Site Features - Asphalt Replacement	15-20	10	5-10	39,000	SF	\$4	\$156,000											\$156,000	\$156,000	
Site Features - Cyclical Concrete and Asphalt Repairs	5	Varies	Varies	1	LS	\$5,000	\$5,000			\$5,000					\$5,000				\$10,000	
Site Features -Tennis Court Resurfacing	15-20	8	Varies	1	LS	\$45,000	\$45,000					\$45,000							\$45,000	
Table 3.8 - Outdoor Pool	•			•		1	1						•		•	•	•	•		
Outdoor Pool - Heating Boiler (Replacement)	20-25	38	0	1	LS	\$30,000	\$30,000		\$30,000										\$30,000	
Outdoor Pool - Vacuum and Filter Pumps Replacement (Below threshold)	Varies	Varies	Varies																\$0	
Outdoor Pool - Cyclical Concrete Repairs	Varies	Varies	Varies	1	LS	\$5,000	\$5,000						\$5,000	005.000				\$5,000	\$10,000	
Outdoor Pool - Exterior finishes, Pool Amenities	Varies	Varies	Varies	1	LS	\$25,000	\$25,000		005.000					\$25,000					\$25,000	
Outdoor Pool - Tile Edging and Parging Repairs	Varies	15	0	1	LS	\$25,000	\$25,000	<u> </u>	\$25,000										\$25,000	
Table 3.9 - Mechanical Systems																				
Mechanical Systems - DHW Boiler Replacement	15-20	8	7-12	1	EA	\$10,000	\$10,000	1	1	1	1			1	1		1	\$10,000	\$10,000	
Mechanical Systems - DHW Storage Tank Replacement	25-30	38	0	1	EA	\$7,500	\$7,500	<del>1</del>	1	<del>                                     </del>				\$7,500	<del>                                     </del>	<del> </del>	<u> </u>	φ10,000	\$7,500	
Mechanical Systems - Exhaust Fan Replacement (Below Threshold)	Varies	Varies	Varies	<u> </u>	LA	φ1,500	φ1,500	1		<u> </u>			+	φ1,500	+				\$7,500	
Troolidation Options - Exhibitor at Tropiacontent (Dolow Till Silloll)	Valles	valics	v di icə	1	1	1	I .			1	1		1	1	1	1	1	1	φυ	
Table 3.10 - Electrical Systems																				
Electrical Systems - Infared scan and switch replacement (Below Threshold)	Varies	Varies	Varies	1															\$0	
	-	•		-		•	•	-	-	•			•	•	•	•	•	•		
Table 3.11 - Fire Supression																				
Fire Supression - Fire Extinguishers - Installation of additional unit (Below Threshold)	Varies	Varies	Varies																\$0	
Table 3.12 - Fire Alarm & Life Safety													_							
			l		L			I							ļ				\$0	
FANALS (Uninflated)							#202 000	60	@EE 000	040.000	ECO 500	CAE DOD	#00 000	600 500	05.000	60		£470 500	0444 400	
TOTALS (Uninflated)	_	1.6		7			\$393,930	\$0	\$55,000	\$10,000	<b>ა</b> ხ∠,530	\$45,000	\$22,900	\$32,500	\$5,000	\$0	\$0	\$178,500	\$411,430	
Laboration Eq.		Inflation	2.5%						1.00	4.005	1.050	1.075	1 100	1 105	1.150	4 475	1 200	1 225	1	
Inflation Fac TOTALS (Inflated)	IOI	Rate		_					1.00	1.025	1.050	1.075	1.100	1.125	1.150	1.175	1.200	1.225	\$465 A47	
IOTAL5 (Initiated)	<b></b>								\$55,000	\$10,250	\$65,657	\$48,375	\$25,190	\$36,563	\$5,750	\$0	\$0	\$218,663	\$465,447	
Term of Analysis	10																			
Total Square Footage within the Site Building	2,615																			
. om. oquato . oomgo tito otto building	2,010																			

\$15.73 \$17.80

LS - Lump Sum SF - Square Foot EA - Each (per unit component) LF - Lineal Foot

Average Cost per unit per Year (Uninflated)
Average Cost per unit per Year (Inflated)