

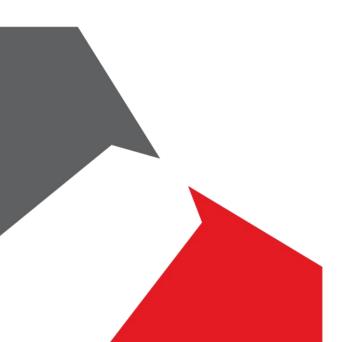
# **REPORT**

# Facility Condition Assessment Report Oliver Community Centre & Pool 665 McKinney Road Oliver, BC

Submitted to:
Oliver Parks and Recreation Society
PO Box 627
Oliver, BC VOH 1T0
Attention: Carol Sheridan, Manager of Recreation

Submitted by: **Stephenson Engineering Ltd.** 138 4<sup>th</sup> Avenue SE, Suite 710 Calgary, Alberta T2G 4Z6

> Date: August 27, 2019 Project No.: 20181842





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#### **EXECUTIVE SUMMARY**

Stephenson Engineering Ltd. (Stephenson) was retained by the Oliver Parks and Recreation Society (the "Society") to perform a Facility Condition Assessment (FCA) in accordance with Stephenson's proposal dated October 12, 2018 of the Oliver Community Centre and Pool located at 665 McKinney Road, Oliver, BC (the "Site").

The Community Centre provides approximately 1,550 m² (16,680 ft²) gross floor area (GFA) according our own estimates and was constructed circa 1976. The Community Centre consists of two single-storey buildings connected by a breezeway and includes a main multipurpose space, meeting rooms, kitchen, fitness area, and administration offices. For the purpose of this report, the two Community Centre buildings are referred to as a single building. The Pool building provides approximately 365 m² (3,930 ft²) GFA according to our own estimates and was constructed circa 1987. The Pool is a seasonal outdoor facility with 25 m outdoor pool and a single-storey building that includes a reception area, lifeguard room, men's and women's changerooms, and mechanical room for the pool. The buildings are adjacent to one another and are situated on a site area totaling approximately 1.2 hectares (3.0 acres).

The projected replacement cost for the Community Centre in 2019 CAD is \$4,215,950.00. The sum of the outstanding deferred maintenance over the 10-year evaluation period in 2019 CAD is \$1,199,500. The Facility Condition Index (FCI) of the Community Centre has been calculated as 28.5% which is an overall poor condition rating.

The projected replacement cost for the Pool in 2019 CAD is \$3,160,400.00. The sum of the outstanding deferred maintenance over the 10-year evaluation period in 2019 CAD is \$788,800. The Facility Condition Index (FCI) of the Community Centre has been calculated as 25.0% which is an overall poor condition rating.

#### 1.1. Summary of Findings

A cursory summary of findings of this FCA is provided below. However, details are not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein. To assess the physical condition of the site components and building, a Site Representative was interviewed and a visual site review was conducted. No destructive or non-destructive testing was conducted. No calculations were performed to confirm the adequacy of the original design.

Based on the findings of this FCA, the following conclusions are made:

#### Architectural

The Community Centre was originally constructed circa 1976, with small additions in 1981 and 2016. An asphalt pavement parking lot is provided at the north of the building, and a paved asphalt area is provided at the west of the building. Concrete site elements include cast-in-place (CIP) concrete sidewalks, dumpster pad, curbs, pedestrian bridge, exterior stairs and ramp, and precast concrete traffic barriers, wheel stops, bollards, block retaining wall, bicycle stand, benches, and drinking fountain. Irrigated landscaped areas are provided around the building.





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The Pool and adjacent site were developed circa 1987. An asphalt pavement parking lot with asphalt curbs is provided at the north of the building. Concrete site elements include a 25-m in-ground gunite pool and tiled in-ground whirlpool, CIP concrete sidewalks, and precast concrete block retaining wall and bicycle stand. Irrigated landscaped areas are provided around the building. The outdoor pool area is enclosed with a chain-link fence with barbed wire cap. A painted wood-framed pedestrian bridge situated on CIP concrete piers provides access from the parking lot to the pool building. Wood planter beds and stairs are provided at the south of the building.

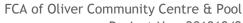
The Community Centre is primarily clad with vertical prefinished corrugated sheet metal siding, with brick masonry veneer at the 1981 additions. Exterior sealants are installed at control joints, openings, and material transitions of the exterior walls. Exterior windows are a combination of single pane and insulated glazed units (IGUs) set in prefinished steel, aluminum, and vinyl frames. The entrance doors are glazed storefront units set in anodized aluminum frames. Exterior utility doors consist of painted hollow metal doors hung in pressed steel painted door frames.

The Pool building is clad with combination of vertical prefinished corrugated sheet metal siding and ribbed precast concrete panels. Exterior sealants are installed at control joints, openings, and material transitions of the exterior walls. Exterior windows are IGUs set in prefinished steel frames. The entrance door is a glazed storefront unit set in anodized aluminum frame. Exterior utility doors consist of painted hollow metal doors hung in pressed painted steel door frames.

Interior flooring finishes at the Community Centre include ceramic tile, vinyl tile, resilient sheet goods, rubber tile, carpet, and painted or unfinished concrete and plywood. Interior wall finishes at the Community Centre are typically painted drywall, with ceramic tile, painted wood, and vinyl wall coverings at some areas. Interior ceiling finishes at the Community Centre consist of painted drywall and acoustic ceiling tiles on a suspended T-bar system. Interior fixtures at the Community Centre include plastic-laminated and stainless-steel counters, painted wood cabinets, coated metal toilet partitions, various washroom accessories, roller window shades, benches, visual display boards, shelving, commercial kitchen appliances, and various exercise equipment.

Interior flooring finishes at the Pool include ceramic tiles and painted concrete. Interior wall finishes at the Pool consist of painted CMU and painted drywall. Interior ceilings at the Pool consist of exposed structure and acoustic ceiling tiles on a suspended T-bar system. Interior fixtures at the Pool include plastic-laminated counters, painted wood cabinets, steel lockers, coated metal toilet partitions, various washroom accessories, and benches.

The Community Centre is provided with a sloped prefinished standing seam sheet metal roof over the majority of the building. A section of styrene-butadiene-styrene (SBS) modified bitumen roofing is provided over the 1981 addition. Roof drainage is handled by prefinished metal gutters and downspouts. Prefinished metal fascia and soffit panels are provided around the building perimeter, with wood fascia and soffit at the breezeway.





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The Pool building is covered with a flat, 4-ply built-up roof (BUR) with pea gravel. Roof drainage is handles by prefinished metal open scuppers and downspouts. Prefinished metal cap flashing is provided around the perimeter of the roof. Perforated aluminum soffit panels are provided over the main entrance.

A cursory review was performed regarding the accessibility and barrier free compliance of the Community Centre and Pool. Generally, the buildings appear to be non-compliant with regards to the barrier-free access to the main entrances, interior circulation, and washrooms. No concerns were observed regarding the barrier-free parking stalls and the pool, however the stalls provided for the Community Centre did not have the required loading aisle between the stalls.

The architectural components are in overall marginal condition. Immediate action items with respect to fire stop is required. Capital expenditures with respect to the asphalt and concrete pavement, pavement markings, concrete curbs, site drainage, irrigation systems, pool and pool fencing, pool, retaining walls, pedestrian bridge, shed, exterior stairs, metal cladding, joint sealers, awning, exterior windows, entrance and utility doors, fascia and soffits, divider curtain, ceramic wall tile, FRP panels, interior painting, interior doors, interior fire-rated doors, acoustic ceiling tiles, resilient sheet flooring, counters and cabinets, lockers, toilet partitions, Change Room/Viewing room benches, Kitchen appliances, Barrier-free interior circulation upgrades, Barrier-free washroom upgrades, metal roof, built-up roof, modified bitumen roof, gutters and downspouts and asbestos abatement are anticipated within the evaluation period. Additional investigation is recommended with respect to the site drainage, barrier-free and hazardous material.

#### Structural

The structural components at the Community Centre are generally concealed by architectural finishes and were not directly reviewed. No structural drawings for the Community Centre were provided for review. Foundations are estimated to consist of a CIP concrete slab-ongrade with spread- and strip-type CIP concrete footings. The superstructure is primarily constructed of steel-framing, excluding the Fitness Room and Mezzanines which are woodframed. The roof is estimated to be constructed of steel decking supported by open web steel joists (OWSJs). No significant cracking or excessive deflection, significant cracks, heaving or settlement was observed that could indicate structural distress.

Some of the structural components at the Pool were concealed by architectural finishes, and only those exposed were directly reviewed. Structural drawings for the Pool and Pool building were provided for review. Based on the drawings provided, the building is situated on top of a combination of spread- and strip-type CIP concrete footings. The flooring consists of a 4-inch CIP concrete slab-on-grade with welded wire mesh reinforcement. Interior walls are reinforced 8-inch CMU, and exterior walls are structural precast concrete panels. The roof is constructed of corrugated steel decking supported by OWSJs. The outdoor swimming pool, whirlpool, and pool deck and constructed of reinforced CIP concrete. Localized cracking and heaving were observed at the Pool, Pool deck, and slab-on-grade. No other significant indicators were observed to indicate structural distress of the building.





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The structural components are in overall acceptable condition. No Immediate action items have been identified. No capital expenditures are anticipated within the evaluation period. Additional investigation is recommended with respect to the Pool and Pool building slab.

#### Mechanical

Domestic water is supplied to both buildings from the municipal mains and is distributed through the buildings via copper piping. Sanitary waste is collected by acrylonitrile butadiene styrene (ABS) plastic piping discharged from both buildings to the municipal mains. Site surface runoff is collected and discharged to the municipal storm water drainage system. Natural gas is supplied into the buildings by the local service provider.

Domestic water at the Community Centre is heated by electric and gas fired water heaters. Plumbing fixtures at the Community Centre include stainless-steel lavatories, a wall-mounted vitreous china lavatory, flush tank vitreous china toilets, wall-mounted vitreous china urinals, an enameled steel service sink, a plastic mop sink, counter-mounted stainless-steel sinks, and drinking fountains.

Domestic water at the Pool is heated by individual electric water heaters at each lavatory. The Pool and Whirlpool are heated through various means including direct and indirect gasfired water heaters, tankless gas-fire water heaters, and a roof-mounted solar hot water heating system. Pool water is filtered by a vacuum media filtration tank and is circulated via polyvinyl chloride (PVC) piping. Plumbing fixtures at the Pool include wall-mounted vitreous china lavatories, counter-mounted stainless-steel lavatories, flush tank vitreous china toilets, wall-mounted vitreous china urinals, a counter-mounted stainless-steel sink, built-in tiled showers, and a stainless-steel drinking fountain.

The Community Centre is heated by a combination of gas-fired rooftop units (RTUs), gas-fired furnaces, and one electric ceiling-mounted heater at the Foyer. The building is cooled by the RTUs as well as a roof-mounted condenser unit servicing the Offices. Exhaust fans are provided for the Washrooms, Kitchen, and Fitness Room.

Gas-fired unit heaters and electric baseboard heaters are used to heat the Mechanical Room and Pool Equipment Room at the Pool building. The building is cooled by an evaporative cooler. Exhaust fans are provided for the Washrooms, Change Rooms, and Service Rooms.

Fire suppression at the Community Centre includes a wet chemical fire suppression system at the Kitchen range hood, and portable fire-extinguishers throughout the building.

Fire suppression at the Pool building is limited to portable ABC-type fire extinguishers.

The mechanical components are in overall acceptable condition. No Immediate action items have been identified. Capital expenditures with respect to the domestic water piping, domestic wastewater piping, showers, service sinks, Pool pumps, furnaces, radiant heating, condensing units, ventilation, temperature control, exhaust fans, and Kitchen extinguishing system are anticipated within the evaluation period. Additional investigation is recommended with respect to the community centre ventilation and building temperature control.





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#### Electrical

Electrical services are provided to both buildings via overhead conductors from a pole-mounted utility-owned transformer located between the buildings. Electricity usage is metered on the exterior of each building. All electrical equipment on Site was found to be 3-phase and 4-wire.

Primary electrical distribution at the Community Centre is handled by a 400-amp, 347/600-volt panelboard. Several secondary sub-panels rated at 225-amp, 120/208-volt are provided throughout the building. Interior lighting typically consists of tubular fluorescent lighting with localized incandescent lighting, controlled by line voltage switches and motion sensors. Exterior lighting consists of LED building-mounted fixtures on photocells. Emergency lights on battery packs and illuminated exit signs are provided throughout the building. Fire detection and alarm devices include a fire alarm control panel, smoke and heat detectors, pull stations, and fire alarm bells. Security systems include an intrusive detection system, surveillance cameras, and an exterior proximity card reader.

The main electrical disconnect switch at the Pool is rated at 400-amp, 240-volt. Secondary sub-panels rated at 225-amp, 120/240-volt located at the Mechanical Room. A motor control centre (MCC) is located at the Pool Equipment Room. Interior lighting consists of tubular fluorescent lighting controlled by line voltage switches and motion sensors. Exterior lighting consists of LED building-mounted fixtures on photocells. Emergency lighting on battery packs and one illuminated exit sign are provided at the Pool building. Security systems include an intrusive detection system and surveillance cameras.

Testing of the electrical systems such as coordination, balancing, ground fault relays, and complete infrared scanning of switches and panels shall be done as part of routine maintenance on an annually basis and all deficiencies rectified immediately.

The electrical components are in overall acceptable condition. Immediate action items with respect to the electrical distribution equipment, electrical outlets, emergency lighting and exit signs are required. Capital expenditures with respect to the Pool primary distribution panel, sub-panels, and MCC, and the interior lighting, fire alarm control panel and devices, security systems, and audio equipment are anticipated within the evaluation period. Additional investigation is recommended with respect to an Arc Flash Hazard Analysis.

No previous hazardous materials reports were made available for review. Based on the year of the construction of the Community Centre (1976), hazardous building materials such as asbestos-containing materials (ACMs), lead-based paints (LBPs), and polychlorinated biphenyls (PCBs) may be present. Based on the age of the Pool (1987), ACMs may be present. No suspect mould was observed at either building.

Immediate investigation / action items identified pertaining to fire stopping, electrical distribution equipment, electrical outlets, emergency lighting and exit signs are required. Deficiencies and Capital Reserve Items have been identified within the 10-year evaluation period with respect to the architectural, structural, mechanical, and electrical components

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and systems. The Immediate Repairs and Capital Reserve Analysis are included in Appendices C and D.

# 1.2. Opinions of Probable Costs

The following tables summarize our opinion of budgets for capital expenditures above the threshold value of \$3,000 over the 10-year evaluation period that is identified by this report. Expenditures that are expected to be managed as part of normal operations are not shown. The budgets assume a prudent level of ongoing maintenance.

# **Community Centre**

Table 1: Summary of Immediate and Capital Reserve Expenditures (uninflated) for Community Centre

Sectio n	Description	Immediate	Reserve Years 1 to 5 (2020 to 2024)	Reserve Years 6 to 10 (2025 to 2029)	10-Year Reserve Total
3.0	Architectural	\$1,000	\$699,500	\$74,600	\$774,100
4.0	Structural	\$0	\$0	\$0	\$0
5.0	Mechanical	\$0	\$280,300	\$8,600	\$288,900
6.0	Electrical	\$3,500	\$111,500	\$25,000	\$136,500
TOTALS		\$4,500	\$1,091,300	\$108,200	\$1,199,500

**Note:** Immediate (2019) expenditures are not included in the Capital Reserve totals.

Table 2: Summary of Capital Reserve Expenditures per year (uninflated) for Community Centre

Year 1	Year 2	Year 3	Year 4	Year 5
\$274,100	\$320,000	\$34,000	\$12,000	\$451,200
Year 6	Year 7	Year 8	Year 9	Year 10
\$4,000	\$22,200	\$51,900	\$14,000	\$16,100



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# <u>Pool</u>

Table 3: Summary of Immediate and Capital Reserve Expenditures (uninflated) for Pool

Section	Description	Immediate	Reserve Years 1 to 5 (2020 to 2024)	Reserve Years 6 to 10 (2025 to 2029)	10-Year Reserve Total
3.0	Architectural	\$0	\$498,000	\$127,300	\$625,300
4.0	Structural	\$0	\$8,000	\$0	\$8,000
5.0	Mechanical	\$0	\$54,700	\$50,400	\$105,100
6.0	Electrical	\$2,500	\$44,400	\$6,000	\$50,400
TOTALS		\$2,500	\$605,100	\$183,700	\$788,800

Note: Immediate (2019) expenditures are not included in the Capital Reserve totals.

Table 4: Summary of Capital Reserve Expenditures per year (uninflated) for Pool

Year 1	Year 2	Year 3	Year 4	Year 5
\$47,200	\$143,500	\$19,900	\$231,500	\$163,900
Year 6	Year 7	Year 8	Year 9	Year 10
\$10,000	\$13,000	\$0	\$157,700	\$3,000

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#### 1.3. Facility Condition Index

The following calculations show how the FCI for each facility was derived, including the estimated replacement cost of each facility. The sum of the 10-year estimated deferred maintenance was obtained from the Capital Reserve Tables (Appendices C and D). The FCI and correlating condition rating have been calculated using the following formula:

$$FCI = \frac{Sum \ of \ Outstanding \ Deferred \ Maintenance}{Replacement \ Value \ of \ an \ Asset} x 100$$

Good	<5%
Fair	5-10%
Poor	10 - 30%
Critical	>30%

Table 5: Replacement Value Calculations for the Community Centre

oot	Gross Floor Area	16680	ft²
Square Foot Cost	Perimeter	858	ft
uar	Concrete Clock, Rigid Steel	\$162.86	/ft²
Sq	Subtotal, Square Foot Cost	\$2,716,426.40	
SC	Kitchen Equipment	\$11,100.00	
tior	Hall Partitions	\$7,275.00	
Additions	Sound System	\$3,720.00	
<	Subtotal, Additions	\$22,095.00	
	Subtotal	\$2,738,520.00	
	Contractor Fee, Profit and General Conditions (25%)	\$684,630.00	
	Design Fee (8%)	\$219,080.00	
	Contingency (15% of Subtotal, Contractor Fee a Design Fee)	\$546,335.00	
	Location Factor	\$27,385.00	
	Total Replacement Cost	\$4,215,950.00	

$$FCI = \frac{Sum \ of \ Outstanding \ Deferred \ Maintenance}{Replacement \ Value \ of \ an \ Asset} \times 100\%$$

$$FCI_{Community Centre} = \frac{\$1,199,500}{\$4,215,950} \times 100 = 28.5\%$$

Based on the calculated FCI, the Community Centre has an overall poor condition rating.

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Table 6: Replacement Value Calculations for the Pool

	Gross Floor Area (Building)	3,930	ft²
	Perimeter (Building)	298	ft
ost	Tilt-up Concrete, Bearing Walls	\$154.17	/ft²
, C	Square Foot Cost (Building)	\$605,888.10	
Foo	Gross Floor Area (Outdoor Pool)	11612	ft²
Square Foot Cost	Perimeter (Outdoor Pool)	432	ft
dns	Pool, Gunite	\$122.00	/ft²
S	Square Foot Cost (Outdoor		
	Pool)	\$1,416,664.00	
	Subtotal, Square Foot Cost	\$2,022,552.10	
St	Diving Board	\$5,300.00	
tior	Sound System	\$2,075.00	
Additions	Solar Heating System	\$22,940.00	
Ă	Subtotal, Additions	\$30,315.00	
	Subtotal	\$2,052,867.10	
	Contractor Fee, Profit and		
	General Conditions (25%)	\$513,220.00	
	Design Fee (8%)	\$164,230.00	
	Contingency (15% of Subtotal,		
	Contractor Fee and Design Fee)	\$409,550.00	
	Location Factor	\$20,530.00	
	Total Replacement Cost	\$3,160,400.00	

$$FCI = \frac{Sum \ of \ Outstanding \ Deferred \ Maintenance}{Replacement \ Value \ of \ an \ Asset} \times 100\%$$

$$FCI_{Pool} = \frac{\$788,\!800}{\$3,\!160,\!400} \times 100 = \mathbf{25.0}\%$$

Based on the calculated FCI, the Pool has an overall poor condition rating.



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#### 2. INTRODUCTION

#### 2.1. Background

Stephenson was retained by the Society to perform a FCA in accordance with Stephenson's proposal dated October 12, 2018 of the Oliver Community Centre and Pool located at 665 McKinney Road, Oliver, BC (the "Site").

The Community Centre provides approximately 1,550 m² (16,680 ft²) gross floor area (GFA) according our own estimates and was constructed circa 1976. The Community Centre consists of two single-storey buildings connected by a breezeway and includes a main multipurpose space, meeting rooms, kitchen, fitness area, and administration offices. For the purpose of this report, the two Community Centre buildings are referred to as a single building. The Pool building provides approximately 365 m² (3,930 ft²) GFA according to our own estimates and was constructed circa 1987. The Pool is a seasonal outdoor facility with 25 m outdoor pool and a single-storey building that includes a reception area, lifeguard room, men's and women's changerooms, and mechanical room for the pool. The buildings are adjacent to one another and are situated on a site area totaling approximately 1.2 hectares (3.0 acres).

#### 2.2. Objectives

The objective of the FCA was to document the Site conditions at the time of the Site reconnaissance and, based on available sources of information and observations of surface conditions during the Site reconnaissance, to identify the exterior site improvements as well as the building structure, envelope, interior finishes, mechanical systems, electrical systems, fire/life safety systems, conveyance devices and visually obvious signs of non-compliance with respect to building code and barrier free accessibility.

# 2.3. Methodology

The FCA was conducted in general accordance with the American Society for Testing and Materials (ASTM) "Standard Guide for Property Condition Assessments: Baseline Property Condition Process E 2018-15", as locally applicable and as stated in our Mandate and Report Resources in Appendix A.

Deviations and exceptions from the aforementioned ASTM are included in this report under section 2.4 ("Deviations from the Guide"). Limitations to our work are provided in Appendix B ("Limitations and Use of the Report").

General building information was provided by Carol Sheridan, Manager of Recreation (hereafter referred to as the "Site Representative"). Site reconnaissance was conducted by Brian Levy, P.Eng. of Stephenson on November 20, 2018. The FCA was completed by Brian Levy, P.Eng. and reviewed by Lawrence McSorley, Architect, AAA of Stephenson. The weather at the time of assessment was sunny and -1°C with no conditions limiting access to Site. The majority of the facility was accessible at the time of the assessment excluding the following; the Manager's Office at the Pool building; which was reviewed from ground-level and from the roof of the adjacent Pool building, and; two storage rooms at the south of the Community Centre which



FCA of Oliver Community Centre & Pool

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are rented out and were reported to be similar to the adjacent storage room used by the Society.

The scope of work did not include sampling or testing to identify the potential presence of hazardous building construction materials such as asbestos-containing materials (ACMs), lead-based paints (LBPs), polychlorinated biphenyl (PCB)-containing electrical equipment or other hazardous materials. Due to the year of construction of the buildings (1976 [Community Centre], and 1987 [Pool]), it is possible that hazardous materials were used during the original construction of the buildings.

An estimated replacement value for each building has been calculated using RS Means Square Foot Costs (2019). The estimates were obtained using a Dollar per Square Foot (\$/ft²) formula, with some additives included as to best match the observed amenities. The square foot area is the GFA of each building based on our estimates and represented in square foot (ft²). The final cost was presented in 2019 Canadian Dollars (CAD). Using the replacement value and the overall 10-year estimated deferred maintenance obtained from our Capital Reserve Table, an FCI for each facility was calculated, which is intended to assist the Client in establishing a benchmark on the relative condition of each facility. The FCIs can be used to compare the cost-effectiveness of maintaining the current facilities versus constructing new facilities.

#### 2.4. Deviations from the Guide

The FCA was conducted and this report prepared in accordance with the scope of work outlined in accordance with Stephenson's proposal dated October 12, 2018 and executed by the Client on October 26, 2018.

The deviations from the ASTM used as a reference to complete the FCA and report for this project were as follows:

- The term "Point of Contact" has been replaced with "Site Representative"
- Verification of number of parking spaces was not conducted.
- Verification of gross and net usable areas of the site buildings was not performed.

#### 2.5. Evaluation Criteria

The FCA was completed in general accordance with the Society's stated scope of work as documented in the Request for Proposals for the Facility Condition Assessment of Oliver Community Centre & Pool (hereafter referred to as the "RFP"). The scope of the FCA was limited to identifying components, systems and potential concerns by visual examination of surface features and operating practices, and from available documented information sources. Only those items identified as being above the specified Capital Threshold will be addressed in the Capital Reserve Table. The Condition Rating system (CR) used throughout this report is based on the RFP:

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1	Critical Unsafe- high risk of injury or critical system failure.	
2	<b>Poor-</b> does not meet requirements, has significant deficiencies. May have high operating / maintenance costs.	
3	Marginal- meets minimum requirements, has significant deficiencies. May have above average operating / maintenance costs.	
4	Acceptable- meets present requirements, minor deficiencies. Average operating/maintenance costs.	
5	Good- meets all present requirements. No deficiencies.	
6	<b>Excellent-</b> as new/state of the art, meets present and foreseeable requirements.	

The capital expenditures identified with respect to deficiencies or deferred maintenance shall be identified by the following categories ("Cat X"):

Category	Description	
Α	Code & Safety	
В	B Repair & Maintenance	
С	C Capital Expenditure	
D Modernization / Improvements		
Е	Other	

Items identified with a CR rating of 1 and/or Cat A, shall be treated as "Immediate" action items, considered to have conditions that include deficiencies that require action in the next 60 to 90 days. Items identified with a CR of 2 or 3 and/or Cat B shall be considered to have conditions that include deficiencies that can be addressed within the next five years (2019 to 2023 in the Capital Reserve Table). Preventative Maintenance (PM) items may have been identified. These PM items are items anticipated to be required to maintain specific components/systems through to the end of their Expected Useful Life (EUL) and are considered to have CR of 4 or better that can be addressed at any time within the 10-year evaluation period (2019 to 2038 in the Capital Reserve Table).

Other non-urgent conditions identified with a CR of 4 to 6, are prioritized by their identification as Cat B to Cat E and are included in the Capital Reserve Table in an appropriate year. For items with no observed or reported deficiencies, a lifecycle replacement (LCR) cost estimate has been provided in the Capital Reserve Table spreadsheet in the year equal to the

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year of original installation plus that component's EUL. For example, if an item with no observed or reported deficiencies is nearing or has surpassed its EUL in the next 5 years (i.e., 2019 to 2023), an LCR cost estimate will be provided in the Lifecycle Plan spreadsheet in year 2023.

For similar components that have been replaced/installed at different times but where the age difference is equal to or less than 20% of the component's EUL, the average install year has been used in calculating the next lifecycle replacement event (i.e., for similar vinyl floor tile installed in 2006 versus 2008, each having a 20 year EUL, an average install year of 2007 has been used to calculate a single lifecycle replacement event in 2027).

No building material sampling or testing was conducted as part of this assessment.

- 2.6. Recommendations for Additional Investigation
- RAI.1) Site Drainage Study.
- RAI.2) Structural Study (Pool).
- RAI.3) HVAC Study (Community Centre).
- RAI.4) Arc Flash Hazard Analysis.
  - 2.7. Desktop Data Collection

The following documents were reviewed:

- Architectural, structural, mechanical, and electrical drawings titled Community Swimming Pool Oliver BC, prepared by Camrec Facilities Consultants Ltd., dated January 22, 1987.
- Architectural drawings titled Oliver Parks and Recreation Community Center Office Renovation, prepared by Thinkspace Architecture Planning Interior Design, dated September 10, 2018.
- Outdoor Pool and Outdoor Hot Tub Interior Health Authority Commercial Inspection Report prepared by the Penticton Health Protection Office, dated June 11, 2018.
  - 2.8. Outstanding Information

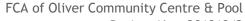
No outstanding information.

#### 2.9. Building and Fire Code Compliance Overview

The Site Representative reported that they were not aware of any outstanding work orders, building code violations or infractions, building ordinances or municipal health and fire safety by-laws violations.

#### 2.10. Evidence of Mould

No suspected mould was identified.



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#### 2.11. Outline of the Report

The report that follows this section contains a summary description of the Site and building systems/components along with a detailed listing and description of systems/components. Furthermore, current, imminent or anticipated deficiencies above the Capital Threshold (if any) and excluding normal operating maintenance are presented with a CR, including a description of the risk/consequence of deferral, probability of imminent/anticipated failure and/or a further description of any failure if it has already occurred.

A more detailed Capital Reserve Tables is presented in Appendices C and D outlining the specific systems/components, EUL, Install Date, Remaining Useful Life (RUL), replacement event type, basis of estimate and specific years for Capital Reserve planning.

#### 2.12. Mandate and Report Resources

Please refer to Appendix A for the report General Purpose, Scope of Work and Reliance for this project and for additional resources related to the assumptions used in preparing this report such as:

Operating and Maintenance Items; and,

Discussions of Overall Concepts and Terminology.

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# 3. SITE DESCRIPTION

#### 3.1. Site Location and Setting

Stephenson the Society to perform a FCA in accordance with Stephenson's proposal dated October 12, 2018 of the Oliver Community Centre and Pool located at 665 McKinney Road, Oliver, BC (the "Site").

The Community Centre provides approximately 1,550 m² (16,680 ft²) GFA according our own estimates and was constructed circa 1976. The Community Centre consists of two single-storey buildings connected by a breezeway and includes a main multipurpose space, meeting rooms, kitchen, fitness area, and administration offices. For the purpose of this report, the two Community Centre buildings are referred to as a single building. The Pool building provides approximately 365 m² (3,930 ft²) GFA according to our own estimates and was constructed circa 1987. The Pool is a seasonal outdoor facility with 25 m outdoor pool and a single-storey building that includes a reception area, lifeguard room, men's and women's changerooms, and mechanical room for the pool. The buildings are adjacent to one another and are situated on a site area totaling approximately 1.2 hectares (3.0 acres).

# 3.2. Site Physical Description

Table 7: Building Physical Description

Site Area	~1.2 hectares (~3.0 acres)
Number of Buildings on Site	Two
Gross Floor Area (GFA)	Community Centre: ~1,550 m <sup>2</sup> (~16,680 ft <sup>2</sup> ) Pool: ~365 m <sup>2</sup> (~3,930 ft <sup>2</sup> )
Levels Above Grade	Community Centre: One Pool: One
Levels Below Grade	Community Centre: None Pool: None
Date of Building Construction	Community Centre: 1976 Pool: 1987
Date of Major Renovations	Community Centre: 1981 (Foyers and Storage Rooms), 2016 (Fitness Room) Pool: None
Percentage Site Coverage by Building(s)	~15%
Percentage Site Coverage by Landscaped/Grassed/Bare Ground Areas	~30%
Percentage Site Coverage by Paved or Other Sealed Surface Materials	~55%



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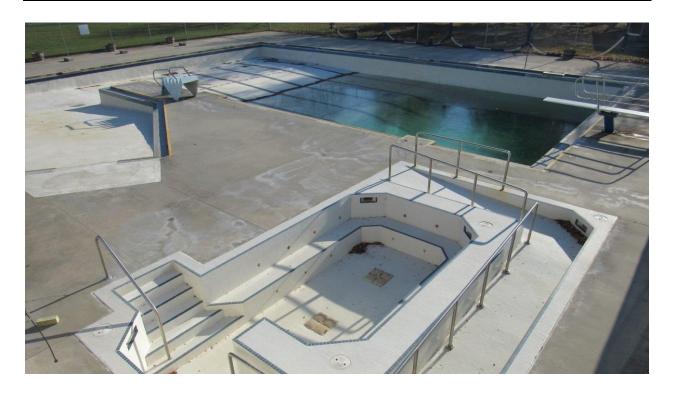
General view of the Community Centre.



General view of the Pool building.



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General view of the Pool.



General view of the Site.





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# 4. ARCHITECTURAL

The Community Centre was originally constructed circa 1976, with small additions in 1981 and 2016. An asphalt pavement parking lot is provided at the north of the building, and a paved asphalt area is provided at the west of the building. Concrete site elements include cast-in-place (CIP) concrete sidewalks, dumpster pad, curbs, pedestrian bridge, exterior stairs and ramp, and precast concrete traffic barriers, wheel stops, bollards, block retaining wall, bicycle stand, benches, and drinking fountain. Irrigated landscaped areas are provided around the building.

The Pool was and adjacent site was developed circa 1987. An asphalt pavement parking lot with asphalt curbs is provided at the north of the building. Concrete site elements include a 25-m in-ground gunite pool and tiled in-ground whirlpool, CIP concrete sidewalks, and precast concrete block retaining wall and bicycle stand. Irrigated landscaped areas are provided around the building. The outdoor pool area is enclosed with a chain-link fence with barbed wire cap. A painted wood-framed pedestrian bridge situated on CIP concrete piers provides access from the parking lot to the pool building. Wood planter beds and stairs are provided at the south of the building.

The Community Centre is primarily clad with vertical prefinished corrugated sheet metal siding, with brick masonry veneer at the 1981 additions. Exterior sealants are installed at control joints, openings, and material transitions of the exterior walls. Exterior windows are a combination of single pane and insulated glazed units (IGUs) set in prefinished steel, aluminum, and vinyl frames. The entrance doors are glazed storefront units set in anodized aluminum frames. Exterior utility doors consist of painted hollow metal doors hung in pressed steel painted door frames.

The Pool building is clad with combination of vertical prefinished corrugated sheet metal siding and ribbed precast concrete panels. Exterior sealants are installed at control joints, openings, and material transitions of the exterior walls. Exterior windows are IGUs set in prefinished steel frames. The entrance door is a glazed storefront unit set in anodized aluminum frame. Exterior utility doors consist of painted hollow metal doors hung in pressed painted steel door frames.

Interior flooring finishes at the Community Centre include ceramic tile, vinyl tile, resilient sheet goods, rubber tile, carpet, and painted or unfinished concrete and plywood. Interior wall finishes at the Community Centre are typically painted drywall, with ceramic tile, painted wood, and vinyl wall coverings at some areas. Interior ceiling finishes at the Community Centre consist of painted drywall and acoustic ceiling tiles on a suspended T-bar system. Interior fixtures at the Community Centre include plastic-laminated and stainless-steel counters, painted wood cabinets, coated metal toilet partitions, various washroom accessories, roller window shades, benches, visual display boards, shelving, commercial kitchen appliances, and various exercise equipment.

Interior flooring finishes at the Pool include ceramic tiles and painted concrete. Interior wall





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finishes at the Pool consist of painted CMU and painted drywall. Interior ceilings at the Pool consist of exposed structure and acoustic ceiling tiles on a suspended T-bar system. Interior fixtures at the Pool include plastic-laminated counters, painted wood cabinets, steel lockers, coated metal toilet partitions, various washroom accessories, and benches.

The Community Centre is provided with a sloped prefinished standing seam sheet metal roof over the majority of the building. A section of styrene-butadiene-styrene (SBS) modified bitumen roofing is provided over the 1981 addition. Roof drainage is handled by prefinished metal gutters and downspouts. Prefinished metal fascia and soffit panels are provided around the building perimeter, with wood fascia and soffit at the breezeway.

The Pool building is covered with a flat, 4-ply built-up roof (BUR) with pea gravel. Roof drainage is handles by prefinished metal open scuppers and downspouts. Prefinished metal cap flashing is provided around the perimeter of the roof. Perforated aluminum soffit panels are provided over the main entrance.

A cursory review was performed regarding the accessibility and barrier free compliance of the Community Centre and Pool. Generally, the buildings appear to be non-compliant with regards to the barrier-free access to the main entrances, interior circulation, and washrooms. No concerns were observed regarding the barrier-free parking stalls and the pool, however the stalls provided for the Community Centre did not have the required loading aisle between the stalls.

The architectural components are in overall marginal condition. Immediate action items with respect to fire stop is required. Capital expenditures with respect to the asphalt and concrete pavement, pavement markings, concrete curbs, site drainage, irrigation systems, pool and pool fencing, pool, retaining walls, pedestrian bridge, shed, exterior stairs, metal cladding, joint sealers, awning, exterior windows, entrance and utility doors, fascia and soffits, divider curtain, ceramic wall tile, FRP panels, interior painting, interior doors, interior fire-rated doors, acoustic ceiling tiles, resilient sheet flooring, counters and cabinets, lockers, toilet partitions, Change Room/Viewing room benches, Kitchen appliances, Barrier-free interior circulation upgrades, Barrier-free washroom upgrades, metal roof, built-up roof, modified bitumen roof, gutters and downspouts and asbestos abatement are anticipated within the evaluation period. Additional investigation is recommended with respect to the site drainage, barrier-free and hazardous material.

A detailed description of Site and building systems/components including (if any) current, imminent or anticipated deficiencies above the Capital Threshold and excluding normal operating maintenance are presented below.



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# A01.0 SITE

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A01.1	Site Servicing	Water: Domestic water is supplied to both buildings via buried piping from municipal mains.  Sanitary Sewer: Sanitary sewer is disposed to buried cast iron piping to the municipal sewer mains.  Natural Gas: Natural gas is supplied to the building via buried piping.  Electrical: power is fed to the building from the local service provider pole-mounted electrical transformer and into the buildings via overhead cables.	4	-	No concerns observed or reported.
A01.2	Landscaping	Landscaping elements throughout the Site include sod, coniferous and deciduous trees, shrubs, and decorative rock.		-	No concerns observed or reported.
A01.3	Asphalt Pavement	Community Centre (1976): The parking lot and drive aisles adjacent to the Community Centre are paved with asphalt. A paved asphalt pad is also provided at the south of the building.  Pool (1987): The curbs, parking lot, and drive aisle adjacent to the Pool are paved with asphalt.	3	С	Community Centre: The asphalt was reported to be original to the construction of the site. Some localized repair patches were noted. Areas with wear and deterioration including longitudinal and alligator cracking. Costing for a full depth replacement has been included in the Capital Reserve Table.  Pool: The asphalt was reported to be original to the construction of the site. Damages to the asphalt curbs was noted. Some longitudinal cracks were noted in the asphalt pavement. The asphalt pavement adjacent to the Pool is currently in acceptable condition and is expected to remain serviceable throughout the evaluation period.



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					Costing for repairs has been included in the Capital Reserve Table.
A01.4	Parking Lot Markings	Community Centre and Pool (~2014): Parking stalls are marked with painted lines in the parking areas. Barrier-free stalls with signage are provided.	4	С	Markings are generally visible but show signs of deterioration and are anticipated to require replacement within the evaluation period. Costing has been combined and included in the Community Centre Capital Reserve Table.
A01.5	Concrete Pavement	Community Centre (1976): CIP concrete sidewalks are located at the Courtyard and to the north of the building. CIP concrete pavement is located at the dumpster area to the west of the building.  Pool (1987): CIP concrete sidewalks are provided at the north and west of the of the building. The pool deck area is also provided with CIP concrete with floor drains.		B/C	Community Centre: All concrete pavement is reported to be original to the construction of the building. Some cracking and deterioration of the concrete sidewalk was observed, but is in serviceable condition. The concrete pavement at the dumpster area is in poor condition and should be replaced. The Capital Reserve Table includes costing to replace the dumpster pad and north sidewalk, followed by replacement of the Courtyard sidewalk in year 8.  Pool: Some newer patches of concrete were poured where tree planters were removed at the north of the building. The remaining sidewalks are reported to be original to the construction of the building. Some cracking of the original concrete sidewalks was observed.
A01.6	Concrete Curbs	Community Centre (1976): CIP concrete curbs are located along the west side of the building.  Pool: Not present.	2	С	Community Centre: The curbs are in poor condition and should be replaced.  Pool: N/A
A01.7	Parking Bumpers	Community Centre (1976): Precast concrete traffic barriers are located at the parking lot near the main entrance. Precast concrete wheel stops are provided at some of the parking stalls. Concrete- filled painted steel pipe bollards are located at pedestrian areas adjacent to the parking lot.	4	С	Community Centre: The traffic barriers are aged with minor deterioration, but are in overall acceptable condition. Repainting of the barriers is recommended within the evaluation period (see Note 4A below). Some wheel stops are severely deteriorated and should be replaced; however, the majority are in acceptable condition and can be replaced at the end of their EUL.



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		(~2005): Precast concrete wheel stops are provided at some of the parking stalls.  Pool: Not present.			Corrosion was noted at the base of the bollards which should be cleaned and repainted (see Note 4A below).  Pool: N/A
A01.8	Site Drainage	Community Centre and Pool (1976/1987): According to the drawings provided, Wolf Cub Creek runs along the north side of the buildings and is fed to an underground culvert at the northwest corner of the Community Centre. Surface runoff and soil absorption handle the majority of drainage on Site. Roof drainage for the Community Centre is collected and fed to buried pipes. Roof drainage for the Pool building is emptied to precast concrete splash pads at grade.	3	B/E	Community Centre and Pool: Several concerns regarding Site drainage were reported including ponding at the breezeway, paved areas at the south of the Community Centre, and of the Pool deck. The Site was dry at the time of review; therefore, no ponding was directly observed. An allowance for a Site drainage study, as well as a preliminary cost for repairs, has been included in the Community Centre Capital Reserve Table. It should be noted that the actual cost of repairs will depend on the results of the investigation.
A01.9	Irrigation	Community Centre and Pool (~1995): An irrigation system services the landscaped areas throughout the Site.	4	В	Community Centre and Pool: The irrigation system was mostly concealed and not directly reviewed. No concerns were observed with any of the sprinkler heads where reviewed. Allowances for ongoing repair and localized replacement of the irrigation system has been included in the Community Centre Capital Reserve Table.
A01.10	Fencing	Community Centre: Not present.  Pool (1987): The outdoor pool area is enclosed with a chain-link fence with barbed wire.	4	С	Community Centre: N/A  Pool: No concerns observed or reported. The fencing is at the end of its EUL and should be replaced within the evaluation period.
A01.11	Pools	Community Centre: Not present.  Pool (1987): The outdoor pool area includes a 25-m in-ground gunite pool and a tiled in-ground whirlpool.	3	B/C	Community Centre: N/A  Pool: Concerns observed with the pool deck include cracking, scaling, and staining. Sealants around the whirlpool area are failing. Cracking, delamination,



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					staining, and previous repair patches were observed in the gunite surface of the pool. Issues regarding the drainage of the Pool deck were also reported. Costing allowance for patching the pool basin and repairing pool deck and sealants has been included in the Capital Reserve Table.
A01.12	Retaining Walls (Concrete)	Community Centre (~1990): A precast concrete block retaining wall planter bed is provided for a tree at the Courtyard. A CIP concrete retaining wall is located at the dumpster area at the west of the building.  Pool (~1990): A precast concrete block retaining wall planter bed is located near the main entrance.		С	Community Centre: Settlement has caused cracks to form in the joints of the retaining wall. The cracking is minor but requires repair (see Note 4A below). No other concerns observed or reported for the block retaining wall. The CIP concrete retaining wall at the dumpster area is in poor condition and should be replaced within the evaluation period.  Pool: No concerns observed or reported.
A01.13	Retaining Walls (Wood)	Community Centre (~1990): Wood-framed retaining wall planter beds with sheet metal cladding are located at the south of the Community Centre.	4	С	Community Centre (~1990): The retaining walls are approaching the end of their EUL and should be replaced within the evaluation period.
A01.14	Signage	<ul> <li>Pool: Not present.</li> <li>~2000: Site signage includes steel-framed site map signs, as well as traffic control pole signs.</li> <li>Building identification signage is also mounted to the exterior of both buildings.</li> </ul>	4	-	Pool: N/A  No concerns observed or reported. On going replacement can be done at less than the capital threshold as required.
A01.15	Bicycle Racks	Community Centre (~1990): A bicycle stand constructed of precast concrete with exposed aggregate is located near the main entrance. The facility is also provided with a painted steel pipe bicycle rack.  Pool (~1990): A bicycle stand constructed of precast concrete with exposed aggregate is located near the main entrance.	4	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported.



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A01.16	Pedestrian Bridges	Community Centre (1976): A CIP concrete pedestrian bridge with asphalt pavement provides access from the parking lot to the building.  Pool (1987): A painted wood-framed pedestrian bridge situated on CIP concrete piers provides access from the parking lot to the building.	4	С	Community Centre: No concerns observed or reported.  Pool: The bridge is currently in acceptable condition but has surpassed its EUL and should be replaced within the evaluation period.
A01.17	Benches	~2005: Exposed aggregate precast concrete benches are located on the Site.	4	-	No concerns observed or reported.
A01.18	Drinking Fountains	~1987: An exposed aggregate CIP concrete drinking fountain is located between the two buildings at the south of the Site.	4	-	No concerns observed or reported (see Note 4A below).
A01.19	Waste Equipment	~2000: Plastic waste receptacles for public use are provided throughout the Site. Steel dumpsters for facility use are located to the west of the Community Centre.	4	-	No concerns observed or reported.
A01.20	Ancillary Buildings	Community Centre: Not present.  Pool (1987): A wood shed is located at the northeast corner of the Pool building.	4	С	Community Centre: N/A  Pool: The shed is approaching the end of its EUL and should be replaced within the evaluation period.
A01.21	Exterior Ramps and Stairs (Concrete)	Community Centre (1976): CIP concrete stairs and a ramp are located along the west side of the Community Centre.	3/4	С	Community Centre: Spalling, cracking, and deterioration of the concrete stairs was observed. Localized honeycombing of the ramp landing was also noted. The sloped portion of the ramp appears to be newer and is in acceptable condition. Costing for replacement of the concrete stairs and ramp landing has been included in the Capital Reserve Table.
		Pool: Not present.			Pool: N/A
A01.22	Exterior Ramps and Stairs (Wood)	Community Centre (1976): Wood stairs provide access to the storage rooms at the south of the Community Centre.	4	-	Community Centre: The wood stairs are approaching the end of their EUL and should be replaced within the evaluation period. Costing has been included with Item A01.13 above.



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# A02.0 EXTERIOR WALLS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A02.1	Metal Cladding	Community Centre (1976/2016): The building is primarily clad with prefinished vertical corrugated sheet metal siding.  Pool (1987): The building is partially clad with prefinished vertical corrugated sheet metal	4	С	Community Centre: The metal cladding has surpassed its EUL and some localized deficiencies including dents and holes were noted; however, the metal cladding is in overall acceptable condition. Costing for replacement of the cladding has been included in Year 5 in the Capital Reserve Table.  Pool: Some localized deficiencies including dents and holes were noted; however, the metal cladding is in
		siding.			overall acceptable condition. The cladding is expected to surpass its EUL within the evaluation period and should be replaced at the same time as the Community Centre.
A02.2	Concrete Cladding	Community Centre: Not present.  Pool (1987): The Pool building is partially clad with ribbed precast concrete panels.	4	-	Community Centre: N/A  Pool: A section of a concrete panel has not been properly repaired and sealed after it was damaged during the installation of the solar heating system (see Note 4A below). No other concerns observed or reported.
A02.3	Brick Cladding	Community Centre (1981): Brick masonry veneer cladding in running bond pattern is provided at the 1981 additions to the building.	4	-	Community Centre: No concerns observed or reported. Weep holes were found to be unobstructed where reviewed. Localized repointing of the cladding may be required within the evaluation period (see Note 4A below).



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		Pool: Not present.			Pool: N/A
A02.4	Joint Sealers	Community Centre (~2016): A combination of silicone- and urethane-based sealants were observed at the openings and material transitions of the exterior walls.  Pool (1987): A combination of silicone- and urethane-based sealants were observed at the control joints, openings, and material transitions of the exterior walls.	2/4	С	Pool: The joint sealants at the Pool were found to have mostly failed and should be replaced to prevent water infiltration and potential damage of the building.
A02.5	Louvers	Community Centre: Not present.  Pool (1987): A prefinished metal air intake louver is located at the north elevation of the building.	4	-	Community Centre: N/A  Pool: No concerns observed or reported. (see Note 4A below).
A02.6	Insulation	Community Centre (1976): Based on the drawings provided, the exterior wall assemblies are estimated to include R20 fibreglass batt insulation. XPS foundation insulation is estimated to be provided around the perimeter of the building.  Pool (1987): Based on the drawings provided, the exterior wall insulation consists of R20 fibreglass batt insulation. 2-inch XPS foundation insulation is also detailed in the drawings.		-	Community Centre: Concealed and not directly reviewed. No concerns observed or reported.  Pool: Concealed and not directly reviewed. No concerns observed or reported.
A02.7	Vapour Barrier	Community Centre (1976): Based on the drawings provided, the exterior wall assemblies are estimated to include a 4-mil polyethylene vapour barrier.  Pool (1987): Based on the drawings provided, the exterior wall assemblies are estimated to include a 4-mil polyethylene vapour barrier.	5	-	Community Centre: Concealed and not directly reviewed. No concerns observed or reported.  Pool: Concealed and not directly reviewed. No concerns observed or reported.



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A02.8	Awnings	Community Centre (1976): A metal-framed window awning with sheet metal covering is located at the west elevation.	4	Community Centre: No concerns observed or reported. The awning should be replaced with the cladding replacement (included in Item A02.1 above ).
7.02.0	3	<b>Pool (2000):</b> A metal-framed awning with canvas covering is located at the south elevation of the Pool building.		<b>Pool:</b> No concerns observed or reported. The awning will reach its EUL within the time frame of this report and should be replaced.

# A03.0 EXTERIOR WINDOWS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A03.1	Exterior Windows	Community Centre (1976): Original exterior windows consist of fixed and operable single glazed units set in prefinished steel frames. (1981): The exterior windows at the 1981 additions are fixed single glazed units set in anodized aluminum frames. (2011): The exterior windows at the Meeting Rooms and the upper exterior windows at the Hall consist of fixed and operable IGUs set in vinyl frames. (2016): The windows at the Fitness Room consist of operable IGUs set in vinyl frames.  Pool (2011): The exterior windows consist of operable IGUs set in prefinished steel frames.	3/4/5	С	Community Centre: The original and 1981 addition windows have, or are approaching, the end of their EUL and should be replaced. It is recommended to replace the windows with IGUs in vinyl frames for greater thermal efficiency. No other concerns observed or reported.  Pool: No concerns observed or reported.

A04.0 EXTERIOR DOORS



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I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A04.1	Entrance Doors	Community Centre (1976/1981): The entrance doors consist of glazed storefront units set in anodized aluminum frames. The entrance doors are equipped with push button openers.  Pool (1987): The entrance door is a glazed storefront unit set in anodized aluminum frame. The entrance door is equipped with a push button opener.	3/4	С	Community Centre: It was reported that the entrance doors routinely stick and typically do not function properly. The doors have surpassed their EUL and should be replaced.  Pool: No concerns observed or reported. The entrance door will surpass its EUL within the evaluation period and should be replaced.
A04.2	Utility Doors	Community Centre (1976/1981/2016): Exterior utility doors consist of painted hollow metal doors hung in painted pressed steel door frames.  Pool (1987): Exterior utility doors consist of painted hollow metal doors hung in pressed steel door frames.	4	С	Community Centre: The exterior utility doors are in acceptable condition. The utility doors (excluding those at the Fitness Room) will surpass their EUL within the evaluation period and should be replaced.  Pool: The exterior utility doors are in acceptable condition, but will surpass their EUL within the evaluation period and should be replaced.
A04.3	Overhead Doors	Community Centre and Pool: Not present.	-	-	Community Centre and Pool: N/A

# A05.0 FASCIA AND SOFFITS

I.D	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A05	.1 Fascia	Community Centre (1976): Prefinished metal fascia is provided around the perimeter of the building. Stain wood shake fascia is provided at the breezeway.	3/4	С	Community Centre: The metal fascia is in acceptable to marginal condition, with some areas showing signs of deterioration. Replacement of the metal fascia is recommended alongside the roofing replacement. The wood shakes are in acceptable condition, but will likely



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		Pool: Not present.			require resealing/restaining within the evaluation period (see Note <b>4A</b> below). <b>Pool:</b> N/A
A05.2	Soffit	Community Centre (1976): The majority of the soffits consist of non-perforated, prefinished metal panels. Stained wood soffit planks are provided at the breezeway.  Pool: Perforated aluminum soffit panels are provided over the main entrance.	3/4	С	Community Centre: The metal soffits are in overall marginal condition, with some areas showing signs of deterioration. Replacement of the metal soffits is recommended alongside the roofing replacement. The wood soffit is in acceptable condition, but will likely require resealing/restaining within the evaluation period (see Note 4A below).  Pool: The soffits are in overall marginal condition, with some areas showing signs of deterioration. Replacement of the soffits is recommended alongside the roofing replacement (see Note 4A below).

# A06.0 INTERIOR WALLS AND PARTITIONS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A06.1	Fixed Partitions	Community Centre (1976): Interior partitions are generally metal stud frames walls with drywall coverings.  Pool (1987): Interior partitions are generally CMU with paint finishes or drywall coverings.		Α	Community Centre and Pool: Service rooms containing electrical or fuel-fired equipment must have fire separations. Section 9.10.9.6.1 of the 2016 BC Building Code states that piping, tubing, ducts, chimneys, wiring, conduit, electrical outlet boxes and other similar service equipment that penetrate a required fire separation shall be tightly fitted or fire stopped to maintain the integrity of the separation. Penetrations at the Furnace Rooms of the Community Centre and Mechanical Room of the Pool



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					were not fire stopped and should be repaired. No other concerns observed or reported.
A06.2	Interior Movable Partitions	Community Centre (1976): A fabric acoustic room divider curtain is located at the Hall.	4	С	Community Centre: The divider curtain is in acceptable condition, but has surpassed its EUL and should be replaced within the evaluation period.
		Pool: Not present.			Pool: No concerns observed or reported.
A06.3	Drywall	Community Centre (1976/1981/2016): Painted drywall interior wall finished are provided throughout the majority of the building.	4	-	Community Centre: Minor localized damages were noted such as at one of the storage mezzanines. Damaged drywall should be repaired (see Note 4A below). No other concerns observed or reported.
		<b>Pool (1987):</b> Painted drywall interior wall finishes are provided at the Viewing, Tickets, Staff, First Aid, Mechanical, and Pool Equipment Rooms.			Pool: No concerns observed or reported.
	Concrete	Community Centre: Not present.	4		Community Centre: N/A
A06.4		<b>Pool (1987):</b> Painted CMU interior wall finishes are provided throughout the building.		-	Pool: No concerns observed or reported.
A06.5	Ceramic Tile	Community Centre (1976/~2000): Ceramic tile wall finishes are provided as backsplash and surrounds at the Washrooms, Kitchen, Meeting Rooms, and Janitor's Closet.	4	С	Community Centre: The ceramic wall tile finishes are in acceptable condition. Some ceramic wall tile is original to the building such as at the Kitchen. This tile has surpassed its EUL and should be replaced within the evaluation period.
		<b>Pool (1987):</b> Ceramic wall tile is provided at the Change Room showers and counter backsplash.			Pool: No concerns observed or reported.
A06.6	Wood	Community Centre (1981): Painted wood wall planks are provided at the 1981 extension Offices. Painted plywood walls are provided at one of the Storage Rooms adjacent to the Hall.	4	С	Community Centre: No concerns observed or reported.  Pool: N/A
		Pool: Not present.			



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A06.7	FRP Panel	Community Centre (1981): FRP panels are provided at the northwest washrooms, and at some sections of the hall and kitchen.  Pool: Not present.	4	С	Community Centre: No concerns observed or reported.  Pool: N/A
A06.8	Paint	Community Centre (~2006): The interior drywalls and wood wall coverings are finishes with paint.	4	В	Community Centre: No concerns observed or reported. The interior walls are reported to be repainted on an ongoing basis. An allowance for repainting has been included in the Capital Reserve Table.
AU6.8		<b>Pool (~2006):</b> The interior drywall and CMU walls are finished with paint.	-	J	<b>Pool:</b> No concerns observed or reported. The interior walls are reported to be repainted on an ongoing basis. An allowance for repainting has been included in the Capital Reserve Table.

# A07.0 INTERIOR DOORS AND WINDOWS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A07.1	Interior Doors	Community Centre (1976): Interior doors are generally painted hollow metal doors hung in painted pressed steel door frames. A sliding pocket door is provided at one of the Offices. Some doors have glazed vision panels.	4	С	Community Centre: No concerns observed or reported.  Doors are reportedly replaced on an ongoing basis as part of routine maintenance. No concerns observed or reported. An allowance for replacement is included in the Capital Reserve Table.
		<b>Pool (1987):</b> Interior doors consist of painted hollow metal doors hung in painted pressed steel door frames.			<b>Pool:</b> No concerns observed or reported. Doors are reportedly replaced on an ongoing basis as part of routine maintenance. No concerns observed or reported. An allowance for replacement is included in the Capital Reserve Table.



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A07.2	Doors	Community Centre and Pool: Interior fire doors and frames appeared to be constructed of adequate building materials where reviewed.	4	С	<b>Community Centre and Pool:</b> The interior door and frame fire ratings have been removed or painted over and were not directly observable. No concerns observed or reported.
A07.3	Interior Windows	Community Centre and Pool: Not present.	-	-	Community Centre and Pool: N/A

# A08.0 CEILINGS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A08.1	Acoustic Ceiling Tiles	Community Centre (1976/1981/2016): Acoustic ceiling tiles on a suspended T-bar system are provided at various areas throughout the building.	4	С	Community Centre: The acoustic ceiling tiles are in overall acceptable condition, but are old and worn in many areas and should be replaced. Localized staining was observed and should be investigated for leaks.
		<b>Pool (1987):</b> Acoustic ceiling tiles on a suspended T-bar system are provided at the Viewing Area, Washrooms, Reception, and Staff Rooms.			<b>Pool:</b> The acoustic ceiling tiles are in overall acceptable condition, but are old and worn in many areas and should be replaced.
A08.2	Exposed Structure	Community Centre: Not present.  Pool (1987): Exposed structure ceilings are present at the Change Rooms, Mechanical Room, and Pool Equipment Room.		-	Community Centre: N/A  Pool: No concerns observed or reported.
A08.3	Drywall	Community Centre (1976): Painted drywall ceiling finishes are generally provided at the Washrooms, Kitchen, Bar, Furnace Rooms, Janitor's Closets, and some Storage Rooms.  Pool: Not present.	3/4	-	Community Centre: Evidence of potential leaks were noted at the Kitchen and at one of the Storage Rooms adjacent to the Hall (under the modified bitumen roof). The leaks should be addressed and the drywall repaired (see Note 4A below).  Pool: N/A



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A08.4	Community Centre (~2006): The interior drywalls ceiling coverings are finishes with paint.	4	_	Community Centre: No concerns observed or reported. The interior ceilings are reported to be repainted on an ongoing basis. Costing has been combined with repainting of the interior walls (see Item A06.8 above).
	Pool: Not present.			Pool: N/A

# A09.0 FLOORING

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A09.1	Ceramic Tile	Community Centre (2011): Ceramic tile flooring is provided at the Hall Washrooms and Vestibules, Kitchen, Bar, some Storage Closets, Administrative Reception, and the northeast Janitor's Closet.  Pool: Ceramic floor tiles are provided throughout the building excluding the Mechanical and Pool Equipment Rooms.	4	-	Community Centre: Damaged tiles were identified at the southwest Hall Vestibule entrance and should be replaced The ceramic tiles are not sticking to the base of the vinyl wall covering in the northwest Washrooms and should be repaired or replaced with a compatible material. No other concerns observed or reported. (See Note 4A below).  Pool: Minor localized damaged or missing floor tiles were observed which should be replaced. Ceramic tiles will pass their EUL within the evaluation period of the report and should be replaced.
A09.2	Resilient Flooring (Vinyl Tile)	Community Centre (~2011): Vinyl tile flooring is provided in Meeting Room 2, northeast Washrooms, furnace room, and corridor, and at the Office Storage Room.  Pool: Not present.	4		Community Centre: Some deficiencies require repair including gaps between tiles at Meeting Room 2 (see Note 4A below). No other concerns observed or reported.  Pool: N/A



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A09.3	Resilient Flooring (Sheet Goods)	Community Centre (1976): Original resilient sheet flooring is provided in one of the Storage Rooms off the 1/3 Hall. (~2000): Resilient sheet flooring is provided at the Hall.  Pool: Not present.	3/4	С	Community Centre: The resilient sheet flooring at the Storage Room is in marginal condition and should be replaced (see Note 4A below). The resilient sheet flooring at the Halls is in acceptable condition, but will surpass its EUL within the evaluation period and should be replaced.  Pool: N/A
A09.4	Resilient Flooring (Rubber Tile)	Community Centre (2016): Rubber tile flooring is provided throughout the Fitness Room.  Pool: Not present.	5	-	Community Centre: No concerns observed or reported.  Pool: N/A
A09.5	Carpet	Community Centre (~2000): Broadloom carpet is provided at Meeting Room 1 and at the Administrative Offices.  Pool: Not present.	4	C	Community Centre: No concerns observed or reported. The carpet flooring is in acceptable condition, but will surpass its EUL within the evaluation period and should be replaced  Pool: N/A
A09.6	Concrete	Community Centre (1976): Painted and unfinished concrete flooring is provided at some of the Storage and Furnace Rooms.  Pool: Painted concrete flooring is provided at the Mechanical and Pool Equipment Rooms.	4	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported.
A09.7	Plywood	Community Centre (1976): Painted and unfinished plywood flooring is provided at the Storage Mezzanines off the 1/3 Hall.  Pool: Not present.	4	-	Community Centre: No concerns observed or reported.  Pool: N/A
A09.8	Paint	Community Centre (1976): Some of the concrete and plywood flooring at the Community Centre are finished with paint.	3	С	Community Centre: The painted finishes are generally worn and should be repainted (see Note 4A below).



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<b>Pool (1987):</b> The concrete flooring at the Pool building are finished with paint.	<b>Pool:</b> The painted finishes are generally worn and should be repainted. (see Note <b>4A</b> below).

#### A10.0 FIXTURES

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A10.1	Counter and Cabinets	Community Centre (~2000): Plastic-laminated counters are provided at the Washrooms, Kitchen, Bar, and Office. Stainless steel counters are provided at the Kitchen. Painted wood cabinets are provided at the Meeting Rooms, Kitchen, and Bar. A wood-framed display cabinet with sliding glass door is located at the Foyer.  Pool (1987): Plastic-laminated counters are provided at the Change Rooms, Reception, and Staff Room. Painted wood cabinets are provided at the Reception and Staff Room.	3/4	С	Community Centre: No concerns observed or reported.  Pool: The counters and cabinets are in marginal condition and should be replaced.
A10.2	Lockers	Community Centre: Not present.  Pool (~1987): Prefinished steel lockers are provided at the Change Rooms and Staff Room.	3	С	Community Centre: N/A  Pool: Functionality concerns were reported regarding the lockers, and they will exceed their EUL during the timeframe of this report Costing to replace the lockers has been included in the Capital Reserve Table.
A10.3	Toilet Partitions	Community Centre (~2000): Coated metal toilet partitions are provided at the Washrooms.	3/4	С	Community Centre: No concerns observed or reported.



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		<b>Pool (~1987):</b> Coated metal toilet partitions are provided at the Change Rooms.			<b>Pool:</b> The toilet partitions are corroded at the bases and are have surpassed their EUL. Costing for replacement has been included in the Capital Reserve Table.
A10.4	Washrooms Accessories	Community Centre (~2000): Washroom accessories include coat hooks, grab bars, toilet paper holders, mirrors, soap dispensers, hand dryers, paper towel holders, waste receptacles, changing tables, and air freshener dispensers.  Pool (~2000): Washroom accessories include coat hooks, grab bars, toilet paper holders, mirrors, soap dispensers, hand dryers, paper towel holders, waste receptacles, and changing tables.	2/4	-	Community Centre: Some concerns were observed regarding the barrier-free accessibility of the washroom accessories (see Item A11.4 below).  Pool: Some concerns were observed regarding the barrier-free accessibility of the washroom accessories (see Item A11.4 below).
A10.5	Window Coverings	Community Centre (~2016): Roller shades are provided at the Meeting Rooms, Fitness Room, and Corridor. Vertical blinds are provided in the hall upper windows  Pool: Not present.	5	-	Community Centre: No concerns observed or reported.  Pool: N/A
A10.6	Benches	Community Centre (~2000): A steel-framed wood bench is provided in the Foyer.  Pool (1987): Steel-framed wood benches are located in the Change Rooms and Viewing Area.	3/4	С	Community Centre: No concerns observed or reported.  Pool: The toilet partitions are corroded at their bases and should be cleaned and repainted (see Note 4A below). Costing for eventual replacement has been included in the Capital Reserve Table.
A10.7	Visual Display Boards	Community Centre (~2000): Whiteboards and projector screens are provided at the Meeting Rooms. A cork board is provided at the Bar.  Pool: Not present.	4	С	Community Centre: No concerns observed or reported.  Pool: N/A
A10.8	Shelving	Community Centre (~2000): Painted wood shelving is provided at the Janitor's Closets and some Storage Rooms.	4		Community Centre: The shelving is approaching the end of its EUL and should be replaced within the evaluation period (see Note 4A below).



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		Pool: Not present.			Pool: N/A
A10.9	Appliances	Community Centre (~2000): A commercial grade refrigerator, dishwasher, and range hood are provided at the Kitchen/Bar. (~2016): A commercial grade natural gas range with griddle, burners, and ovens is provided in the Kitchen.  Pool: Not present.	4	С	Community Centre: The kitchen appliances are reported to be heavily used and in need of replacement (excluding the range). An allowance for replacement of the kitchen appliances has been included in the Capital Reserve Table.  Pool: N/A
A10.10	Exercise Equipment	Community Centre (~2016): Various exercise equipment is provided at the Fitness Room.  Pool: Not present.	5	-	Community Centre: No concerns observed or reported.  Pool: N/A

# A11.0 BARRIER-FREE REQUIREMENTS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A11.1	Parking	Community Centre and Pool: Barrier-free parking stalls with pavement markings and pole signage are provided.	3	A	Community Centre: loading aisle is not provided between the current spaces- no van accessible space is provided. (see Note 4A).  Pool: No concerns observed or reported. A barrier free study is recommended in the capital reserve table of Community Centre to investigate barrier free requirement for both buildings. Allowance is provided for upgrades. The actual cost of upgrades will be based on the results of study.



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A11.2	Access Route and Building Entrance	Community Centre: Push-button door openers is provided at the building's main entrances. The access routes from the parking lot to the main entrances generally complies with barrier-free guidelines.  Pool: A push-button door opener is provided at the main entrance, however the sloped grade to the	2/5	A	Community Centre: No concerns observed or reported.  Pool: The pedestrian bridge connecting the building to the adjacent parking lot does not meet barrier-free guidelines.
		door is too steep, and no proper ramp and landing is provided. The access route from the parking lot to the main entrance does not comply with barrier-free guidelines.			The bridge should be replaced with a barrier-free complaint bridge. The grades and paving leading to the main door should be replaced. (see Item A01.16 above). The pool and Jet pool do not have proper ramp access and handrails.
	Interior Circulation	Community Centre: The Stage and some Storage Rooms have elevated surfaces and are not accessible. Door hardware doe not meet barrier-free guidelines.			Community Centre: Knob-type door handles are provided at the interior doors and should be replaced with lever-type handles
A11.3		<b>Pool:</b> Door hardware doe not meet barrier-free guidelines.	2	A	Pool: Knob-type door handles are provided at the interior doors and should be replaced with lever-type handles  Costing allowance for repairs has been included in the Capital Reserve Table.
A11.4	Washrooms	Community Centre: The washrooms do not meet barrier-free guidelines.	2	D	Community Centre: Deficiencies with the washrooms include inadequate signage, grab bars, dispensers and other amenities installed too high, mirrors installed too high, improper toilet stall locking mechanisms, and uninsulated lavatory pipes, improper valves on sinks and lack of required clearances.



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Pool: The washrooms do not meet barrier-free guidelines.	Pool: Deficiencies with the washrooms include inadequate grab bars, dispensers and other amenities installed too high, mirrors installed too high, improper toilet stall locking mechanisms, and uninsulated lavatory pipes- no roll in showers or accessible change rooms provided  Costing allowance for repairs has been included in the Capital Reserve Table.
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## R01.0 ROOFING

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
R01.1	Metal Roof	Community Centre (1976/1981/2016): The majority of the building is covered with a sloped prefinished standing seam sheet metal roof.	3/5	С	Community Centre: Some roof leaks were reported at the Community Centre. The roof is reported to be original to the building and has surpassed its EUL and should be replaced. The metal roof over the Fitness Room addition is newer and is assumed to be in good condition.
		Pool: Not present.			Pool: N/A
		Community Centre: Not present.			Community Centre: N/A
R01.2	Built-up Roof	<b>Pool (2000):</b> The Pool building is covered with a flat, 4-ply BUR with pea gravel.	4	С	Pool: No concerns were reported regarding the roof at the Pool building. The roof is largely covered by the solar heating equipment and could not be directly reviewed. Minor localized tar boil was observed at the southwest corner of the roof. Debris was noted at the east side of the roof which should be removed as part of regular maintenance. The roof is currently in acceptable condition, but has surpassed its EUL and should be replaced



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					within the evaluation period. An inflated unit cost has been used to account for removing and reinstating the solar heating system.
R01.3	Modified Bitumen Roof	Community Centre (2000): A section of SBS modified bitumen roofing is provided over the 1981 addition to the west of the Community Hall.	3	С	Community Centre: Ponding was observed at the south end of the roof section, as well as several membrane blisters throughout. Water damage was also noted at the ceiling finishes in the storage rooms below the ponding area. The roof is in marginal condition and should be replaced.
		Pool: Not present.			Pool: N/A
R01.4	Gutters and Downspouts	Community Centre (1976): Roof drainage is handled by prefinished metal gutters and downspouts.  Pool (1987): Roof drainage is handles by	4	С	Community Centre: The gutters were found to be leaking at several locations during the review. Replacement should occur alongside the roofing replacement.  Pool: No concerns observed or reported. Replacement
		prefinished metal open scuppers and downspouts.			should occur alongside the roofing replacement (see Note 4A below).
R01.5	Insulation	Community Centre (1976): The roof assembly is estimated to include rigid insulation panels.  Pool (1987): Based on the drawings provided, the roof insulation consists of either 1.5-inch XPS rigid insulation (Alternate "A"), or 2.0-inch rigid fibreglass insulation (Alternate "B").	4	-	Community Centre: Concealed and not directly reviewed. No concerns observed or reported. Cost of new insulation is included in the cost of the roof replacement above.  Pool: Concealed and not directly reviewed. No concerns observed or reported. Cost of new insulation is included in the cost of the roof replacement above.
R01.6	Vapour Barrier	Community Centre (1976): Based on the drawings provided, the roof assembly is estimated to include a 4-mil polyethylene vapour barrier.  Pool (1987): Based on the drawings provided, the roof assembly includes a 4-mil polyethylene vapour barrier.	4	-	Community Centre: Concealed and not directly reviewed. No concerns observed or reported.  Pool: Concealed and not directly reviewed. No concerns observed or reported.



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R01.7	Flashing	Community Centre: Not present.  Pool (1987): Prefinished metal cap flashing is provided around the perimeter of the roof.	4	С	Community Centre: N/A  Pool: The flashing is currently in acceptable condition, but has surpassed its EUL and should be replaced alongside the roof replacement. Costing has been included with Item R01.2 above.
R01.8	Skylights	Community Centre and Pool: Not present.		-	Community Centre and Pool: N/A
R01.9	Roof Ladder	Community Centre and Pool: Not present.	-	-	Community Centre and Pool: N/A

# A99.0 OTHER (HAZARDOUS MATERIALS)

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A99.1	Asbestos	Community Centre: Based on the age of the building (1976), ACMs may have been used during original construction.  Pool: Based on the age of the building (1987), ACMs may have been used during original construction.		-	Community Centre: No asbestos survey has been conducted at the Community Centre. Sampling should be completed prior to any renovations or disturbance of any potential ACMs. A hazardous material study is recommended. Allowance is provided for abatement. The actual cost of abatement will be based on the results of study.  Pool: No asbestos survey has been conducted at the Community Centre. Sampling should be completed prior to any renovations or disturbance of any potential ACMs. A hazardous material study is recommended. Allowance is provided for abatement. The actual cost of abatement will be based on the results of study.
A99.2	Lead	Community Centre: Based on the age of the building (1976), LBPs may have been used during the original construction.	4	-	Community Centre: No lead surveys have been conducted at the Community Centre. Any potential LBPs have likely been repainted and encapsulated since the



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		<b>Pool:</b> Based on the age of the building (1987), no LBPs were likely to have been used at the Pool.			original construction. Sampling should be completed prior to any renovations or disturbance of any potential LBPs.  Pool: No concerns observed or reported.
A99 3	Polychlorinated Biphenyls	Community Centre: Based on the age of the building (1976), PCBs may be present in the fluorescent light ballasts.	4	-	Community Centre: Any building materials containing PCBs should be properly handled and disposed of when removed/replaced.
		<b>Pool:</b> Based on the age of the building (1987), no PCBs are likely to be present in the building.			<b>Pool:</b> No concerns observed or reported.
A99.4	Mould	Community Centre and Pool: No suspect mould was observed.	4	-	Community Centre and Pool: No concerns observed or reported.

#### **NOTES:**

**4A)** The cost associated with repairs/replacement of this item is expected to fall below the Capital Threshold; as such, no costing has been included in the Capital Reserve Table.

#### **IMMEDIATE ITEMS IDENTIFIED:**

**Community Centre:** 

Imm.1) Install Fire Stop.

Pool:

No Immediate work items were identified.

#### **CAPITAL RESERVE ITEMS IDENTIFIED:**

Community Centre:

**Community Centre:** 

**A01.3)** Replace the Asphalt Pavement.

A01.4) Repaint the Pavement Markings.

A01.5) Replace the Concrete Pavement.

A01.6) Replace the Concrete Curbs.

A01.8) Repair Site Drainage - Community Centre

A01.8) Repair Site Drainage - Pool

A01.9) Repair / Replace the Irrigation Systems.

A01.12) Replace the Concrete Retaining Wall.

A01.13) Replace the Wood Retaining Wall.

Pool:

A01.3) Replace the Asphalt Pavement.

A01.4) Repaint Pavement Markings

A01.5) Replace the Concrete Pavement.

A01.10) Replace the Pool Fencing.

A01.11) Repair the Pool.

A01.12) Replace the Concrete Retaining Wall.

**A01.16)** Replace the Pedestrian Bridge.

A01.20) Replace the Shed.

A02.1) Replace the Metal Cladding.

A02.4) Replace the Joint Sealers.





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<b>A01.21</b> ) Re	place the	Exterior	Stairs.
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A02.1) Replace the Metal Cladding.

**A02.4)** Replace the Joint Sealers.

A03.1) Replace the Exterior Windows.

A04.1) Replace the Entrance Doors.

A04.3) Replace the Utility Doors.

A05.1) Replace the Metal Fascia.

A05.2) Replace the Soffits.

A06.2) Replace the Divider Curtain.

A06.5) Replace the Ceramic Wall Tile.

A06.7) Replace FRP Panels.

A06.8) Repaint the Interior Walls/Ceilings.

A07.1) Replace Interior Doors

A07.2) Replace Interior Doors - Fire Rated

A08.1) Replace the Acoustic Ceiling Tiles.

A09.4) Replace the Resilient Sheet Flooring.

A09.5) Replace Carpet Flooring

**A10.10**) Replace the Kitchen Appliances.

A11.4) Barrier-Free Washroom Upgrades.

**R01.1)** Replace the Metal Roof.

R01.3) Replace the Modified Bitumen Roof.

**R01.4)** Replace the Gutters and Downspouts

A99.1) Asbestos Abatement

No other Capital Reserve Items above the threshold identified.

A02.8) Replace the Awning.

A04.1) Replace the Entrance Doors.

A04.3) Replace the Utility Doors.

A06.5) Replace the Ceramic Wall Tile.

A06.8) Repaint the Interior Walls.

A07.1) Replace Interior Doors

A07.2) Replace Interior Fire Rated Doors

A08.1) Replace the Acoustic Ceiling Tiles.

A09.1) Replace Ceramic Tile Flooring

A09.9) Repaint the Concrete Floors.

A10.1) Replace the Counters and Cabinets.

A10.2) Replace the Lockers.

A10.3) Replace the Toilet Partitions.

A10.6) Replace the Change Room Benches.

A11.3) Barrier-free Interior Circulation Upgrades

A11.4) Barrier-Free Washroom Upgrades.

R01.2) Replace the Built-up Roof.

A99.1) Asbestos Abatement

No other Capital Reserve Items above the threshold identified.

## **RECOMMENDED ADDITIONAL INVESTIGATION:**

## Community Centre:

RAI.1) Site Drainage Study.

RAI.2) Barrier-free Study.

RAI.3) Hazardous material Study

#### Pool:

RAI.1) Hazardous Material Study - Pool



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Photo #A1: General view of the asphalt parking lot.

Photo #A2: Concrete walkway at the Community Centre Courtyard.



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Photo #A3: Patched Pool basin.

**Photo #A4:** Exterior cladding and utility doors of the Community Centre.



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**Photo #A5:** Exterior entrance door and windows at the Community Centre.

**Photo #A6:** Exterior cladding, windows, and utility doors at the Pool.



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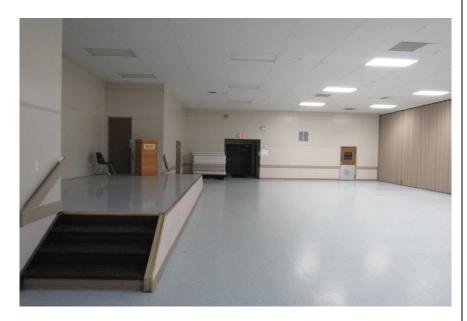




Photo #A7: Interior finishes at the Community Centre Hall.

Photo #A8: Interior finishes at the Community Centre Kitchen.



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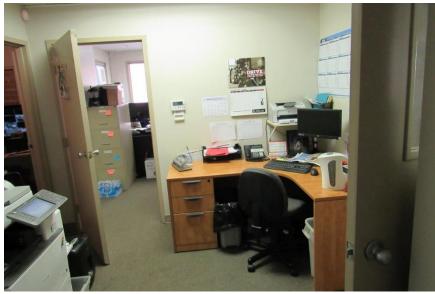


Photo #A9: Interior finishes at the Community Centre Fitness Room.

Photo #A10: Interior finishes of a Community Centre Office.



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**Photo #A11:** Interior finishes of a Community Centre Washroom.

Photo #A12: Interior finishes of a Pool Change Room.



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Photo #A13: Interior finishes of the Pool Reception and Viewing Area.

Photo #A14: Metal roof at the Community Centre.



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Photo #A15: Modified bitumen roof at the Community Centre.

Photo #A16: Built-up roof at the Pool.



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#### 5. STRUCTURAL

The structural components at the Community Centre are generally concealed by architectural finishes and were not directly reviewed. No structural drawings for the Community Centre were provided for review. Foundations are estimated to consist of a CIP concrete slab-on-grade with spread- and strip-type CIP concrete footings. The superstructure is primarily constructed of steel-framing, excluding the Fitness Room and Mezzanines which are wood framed. The roof is estimated to be constructed of steel decking supported by open web steel joists (OWSJs). No significant cracking or excessive deflection, significant cracks, heaving or settlement was observed that could indicate structural distress.

Some of the structural components at the Pool were concealed by architectural finishes, and only those exposed were directly reviewed. Structural drawings for the Pool and Pool building were provided for review. Based on the drawings provided, the building is situated on top of a combination of spread- and strip-type CIP concrete footings. The flooring consists of a 4-inch CIP concrete slab-on-grade with welded wire mesh reinforcement. Interior walls are reinforced 8-inch CMU, and exterior walls are structural precast concrete panels. The roof is constructed of corrugated steel decking supported by OWSJs. The outdoor swimming pool, whirlpool, and pool deck and constructed of reinforced CIP concrete. Localized cracking and heaving were observed at the Pool, Pool deck, and slab-on-grade. No other significant indicators were observed to indicate structural distress of the building.

The structural components are in overall acceptable condition. No Immediate action items have been identified. Capital expenditures with respect to the Pool basin, deck, and building slab are anticipated within the evaluation period. Additional investigation is recommended with respect to the Pool and Pool building slab.

A detailed description of the Site and building structural systems/components including (if any) current, imminent or anticipated deficiencies above the Capital Threshold and excluding normal operating maintenance are presented below.



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## **S01.0 FOUNDATIONS**

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
S01.1		Community Centre (1976/1981/2016): A combination of spread- and strip-type footings are estimated to be provided.	5	_	Community Centre: No concerns observed or reported.
301.1		<b>Pool (1987):</b> Based on the drawings provided, a combination of spread- and strip-type CIP concrete footings are provided.			Pool: No concerns observed or reported.

## S02.0 FLOORS ON GRADE

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
S02.1		Community Centre (1976/1981/2016): The floor construction is estimated to consist of a CIP concrete slab-on-grade.  Pool (1987): Based on the drawings provided, the Pool building floor construction consists of a 4-inch CIP concrete slab-on-grade with welded wire mesh reinforcement.	3/4	K/F	Community Centre: No concerns observed or reported.  Pool: Localized heaving was observed and reported in the Change Rooms. An allowance has been provided for a structural study, as well as a preliminary cost for repairs (see Item S99.1 below). It should be noted that the actual cost of repairs will depend on the results of the investigation.

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## S03.0 SUSPENDED FLOOR AND STAIRS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
S03.1	Suspended Floors	Community Centre: The stage and storage mezzanines at the ½ Hall are of wood-frame construction with plywood flooring.	4	-	Community Centre: No concerns observed or reported.
		Pool: Not present.			Pool: N/A
	Crawlspace	Community Centre: Not present.			Community Centre: N/A
\$03.2		Pool: Not present.	-	-	Pool: N/A
\$03.3	Stairs	Community Centre: The stairs and the stage and storage mezzanines at the ½ Hall are of woodframe construction with plywood treads/risers.	4	-	Community Centre: No concerns observed or reported.
		<b>Pool:</b> CIP concrete stairs provide access to the depressed area in the Pool Equipment Room.			Pool: No concerns observed or reported.

#### **S04.0 ROOF STRUCTURES**

I.D	)#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
<b>S</b> 04	4.1	Framing	Community Centre (1976/1981): The roof of the original building and the 1981 additions are estimated to be framed with OWSJ. (2016): The roof of the 2016 addition is reported to be constructed with wood framing.	5	-	Community Centre: Concealed and not directly reviewed. No concerns observed or reported.



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		Pool (1987): The Pool building roof is framed with OWSJ.			Pool: No concerns observed or reported.
S04.2	Decking	Community Centre (1976/1981): The roof of the original building and the 1981 additions are estimated to have corrugated steel decking. (2016): The roof of the 2016 addition is reported to be constructed with wood decking.  Pool (1987): The Pool building roof deck is corrugated steel.	5	-	Community Centre: Concealed and not directly reviewed. No concerns observed or reported.  Pool: No concerns observed or reported.
\$04.3	Lateral Resistance	Community Centre (1976/1981): Lateral resistance of the roof structures at the original building and 2981 additions are estimated to consist of steel-framed cross-bracing. (2016): Lateral resistance of the 2016 addition roof structure is estimated to consist of wood- framed cross-bracing.  Pool (1987): Lateral resistance is provided by steel-framed cross-bracing.	5	-	Community Centre: Concealed and not directly reviewed. No concerns observed or reported.  Pool: No concerns observed or reported.

#### S05.0 INTERIOR WALLS AND COLUMNS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
\$05.1	Interior Walls	Community Centre:	5	1	Community Centre: No concerns observed or reported.



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	(1976/1981): The interior walls throughout the building are estimated to primarily be constructed of steel stud framing. (2016): The interior walls at the Fitness Room is reported to be of wood-frame construction.  Pool (1987): Based on the drawings provided, the interior walls are constructed of reinforced 8-inch CMU.			<b>Pool:</b> No concerns observed or reported.
\$05.2	Community Centre (1976): Interior columns, where present, are estimated to be HSS members.  Pool: Not present.	5	-	Community Centre: No concerns observed or reported.  Pool: N/A

## **S06.0 EXTERIOR WALLS AND COLUMNS**

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
\$06.1	Exterior Load-bearing Walls	Community Centre (1976/1981): The exterior load-bearing walls are estimated to be of steel frame construction.  Pool (1987): Based on the drawings provided, the exterior walls are constructed of structural precast concrete panels.	5	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported.
\$06.2	Exterior Columns	Community Centre (1976/1981): Structural steel columns are estimated to have been used in the construction of the exterior walls.  Pool: Not present.		-	Community Centre: No concerns observed or reported.  Pool: N/A

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#### S99.0 OTHER

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
S99.1	Specially Engineered	Community Centre: Not present.  Pool (1987): The outdoor swimming pool, whirlpool, and pool deck and constructed of reinforced CIP concrete.		B/E	Community Centre: N/A  Pool: Concerns were reported regarding the pool basin, as well as heaving of the pool deck. An allowance has been provided for a structural study, as well as a preliminary cost for repairs. It should be noted that the actual cost of repairs will depend on the results of the investigation.

#### **NOTES:**

None.

**IMMEDIATE ITEMS IDENTIFIED:** 

Community Centre: Pool:

No immediate work items were identified. 
No immediate work items were identified.

**CAPITAL RESERVE ITEMS IDENTIFIED:** 

Community Centre Pool

No Capital Reserve Items were identified. S99.1) Pool Basin, Deck, and Slab Repairs.

No other Capital Reserve Items above the threshold identified.

**RECOMMENDED ADDITIONAL INVESTIGATION:** 

Community Centre Pool

No Capital Reserve Items were identified. RAI.2) Structural Study (Pool) and Pool Change room Slab.

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Photo #S1: CIP concrete floor slab at the Community Centre.

Photo #S2: CIP concrete floor slab at the Pool.



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**Photo #S3:** Wood-framed storage mezzanine at the Community Centre.



Photo #S4: Roof structure of the Pool building.



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**Photo #S5:** Exterior wall column at the Community Centre.

Photo #S6: CMU interior wall at the Pool building.



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Photo #\$7: Cracks at Pool Deck.

Photo #S8: Cracked Pool Basin.



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#### 6. MECHANICAL

Domestic water is supplied to both buildings from the municipal mains and is distributed through the buildings via copper piping. Sanitary waste is collected by acrylonitrile butadiene styrene (ABS) plastic piping discharged from both buildings to the municipal mains. Site surface runoff is collected and discharged to the municipal storm water drainage system. Natural gas is supplied into the buildings by the local service provider.

Domestic water at the Community Centre is heated by electric and gas fired water heaters. Plumbing fixtures at the Community Centre include stainless-steel lavatories, a wall-mounted vitreous china lavatory, flush tank vitreous china toilets, wall-mounted vitreous china urinals, an enameled steel service sink, a plastic mop sink, counter-mounted stainless-steel sinks, and drinking fountains.

Domestic water at the Pool is heated by individual electric water heaters at each lavatory. The Pool and Whirlpool are heated through various means including direct and indirect gasfired water heaters, tankless gas-fire water heaters, and a roof-mounted solar hot water heating system. Pool water is filtered by a vacuum media filtration tank and is circulated via polyvinyl chloride (PVC) piping. Plumbing fixtures at the Pool include wall-mounted vitreous china lavatories, counter-mounted stainless-steel lavatories, flush tank vitreous china toilets, wall-mounted vitreous china urinals, a counter-mounted stainless-steel sink, built-in tiled showers, and a stainless-steel drinking fountain.

The Community Centre is heated by a combination of gas-fired rooftop units (RTUs), gas-fired furnaces, and one electric ceiling-mounted heater at the Foyer. The building is cooled by the RTUs as well as a roof-mounted condenser unit servicing the offices. Exhaust fans are provided for the Washrooms, Kitchen, and Fitness Room.

Gas-fired unit heaters and electric baseboard heaters are used to heat the Mechanical Room and Pool Equipment Room at the Pool building. The building is cooled by an evaporative coolers. Exhaust fans are provided for the Washrooms, Change Rooms, and Service Rooms.

Fire suppression at the Community Centre includes a wet chemical fire suppression system at the Kitchen range hood, and portable fire-extinguishers throughout the building.

Fire suppression at the Pool building is limited to portable ABC-type fire extinguishers.

The mechanical components are in overall acceptable condition. No Immediate action items have been identified. Capital expenditures with respect to the domestic water piping, domestic wastewater piping, showers, service sinks, pool pumps, furnaces, condensing units, ventilation, temperature control, exhaust fans, and Kitchen extinguishing system are anticipated within the evaluation period. Additional investigation is recommended with respect to the Community Centre ventilation and building temperature control.

A detailed description of the Site and building mechanical systems/components including (if any) current, imminent or anticipated deficiencies above the Capital Threshold and excluding normal operating maintenance are presented below.



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## M01.0 SITE SERVICES

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
M01.1	Domestic Water Supply	Community Centre (1976): Domestic water is supplied by municipal mains.  Pool (1987): Domestic waster is supplied by municipal mains. Water use is metered in the Mechanical Room.	4	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported.
M01.2	Sanitary Sewer	Community Centre (1976): Sanitary waste is discharged to municipal mains.  Pool (1987): Sanitary waste is discharged to municipal mains.	4	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported.
M01.3	Storm Sewer	Community Centre (1976): Surface runoff is collected and discharged to the municipal storm water drainage system.  Pool (1987): Surface runoff is collected and discharged to the municipal storm water drainage system.	4	-	Community Centre: No concerns observed or reported. See item A01.8  Pool: No concerns observed or reported.
M01.4	Natural Gas	Community Centre (1976): Natural gas is supplied to the building by the local service provider.  Pool (1987): Natural gas is supplied to the building by the local service provider.	4	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported.



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## M02.0 PLUMBING

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
M02.1	Water Distribution	Community Centre and Pool (1976/1987): Domestic water is distributed throughout the buildings via copper piping. The Pool water circulation piping appears to be primarily PVC.	4	-	Community Centre and Pool: No concerns observed or reported.  Water distribution pipes in the Community Centre re past their EUL and should be replaced within the evaluation period.  Water distribution pipes in pool will pass their EUL and should be replaced within the evaluation period.
M02.2	Backflow Prevention	Community Centre and Pool (~2005): A 2-inch cross connection control device is installed on the main domestic water lines.		-	Community Centre and Pool: No concerns observed or reported.
M02.3	Water Heaters (Domestic)	Community Centre: (-2008): Individual electric water heaters are provided under each lavatory at the northeast Washrooms. A Hatco-brand electric water heater booster is located in the Kitchen. (-2009): Two gas-fired water heaters are located at the southwest furnace room. Technical specifications are provided below:  Manufacturer: Giant Model Number: UG50-38LF-N1U Serial Number: A 5554243 Capacity: 189-L Input: 40,000-BTU/hr  Manufacturer: Rheem		-	Community Centre: No concerns observed or reported.



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		Model Number: PRO-50-45M Serial Number: 0498J74741 Capacity: 189-L			
		Input: 45,000-BTU/hr  (~2012): An electric water heater is located at the northwest Janitor's Room. Technical specifications are provided below:  Manufacturer: GSW  Model Number: 6G50SDE1  Serial Number S1203F705143			
		Capacity: 184 L Input: 3,000 W  Pool (~2008): Individual electric water heaters are provided under each lavatory.			Pool: No concerns observed or reported.
		Community Centre: Not present.			Community Centre: N/A
M02.4	Water Heaters (Pool)	Pool (-2016): Two gas-fired Pool water heaters and one gas-fired Whirlpool water heater are located in the Mechanical Room. The Pool water heaters are manufactured by Hayward and have a capacity of 400,000-BTU/hr each. Associated heating equipment including expansion tanks and heat exchangers were also noted.		-	Pool: No concerns observed or reported.
M02.5	Indirect Water Heaters (Pool)	Community Centre: Not present.  Pool (~2016): A SMART indirect-fired water heater manufactured by ACV Triangle Tube is located in the Mechanical Room.	5	-	Community Centre: N/A  Pool: No concerns observed or reported.
M02.6	Tankless Water Heaters (Pool)	Community Centre: Not present.	4	-	Community Centre: N/A  Pool: No concerns observed or reported.



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		<b>Pool (~2008):</b> Two gas-fired tankless water heaters are provided for the pool. Technical specifications for the units are provided blow:			
		Manufacturer: Noritz Model Number: N-0841MC Serial Number: 2008.10-001841 Input: 199,900-BTU/hr			
		Community Centre: Not present.			Community Centre: N/A
M02.7	Solar Water Heating System	<b>Pool</b> (~2008): A solar hot water heating system manufactured by Apricus is provided for the Pool. The system includes a number of solar collectors on the roof, expansion tank, a flow meter, and associated piping.	4	-	<b>Pool:</b> Minor deficiencies were noted including corrosion of the solar collector roof-mounts. (see Note <b>6A</b> below). No other concerns observed or reported.
		Community Centre and Pool (1987/1976): Wastewater piping is ABS plastic where reviewed.			Community Centre and Pool: No concerns observed or reported.
M02.8	Waste Water Piping		4	-	Waste water pipes in the Community Centre are past their EUL and should be replaced within the evaluation period.
					Waste water pipes in the Pool will pass their EUL and should be replaced within the evaluation period.
M02.9	Irrigation System	Community Centre and Pool (~1995): An irrigation system services the landscaped areas throughout the Site.		-	Community Centre and Pool: No concerns observed or reported. Refer to Item A01.9 above.
M02.10	Washrooms Fixtures	Community Centre (~2008): Washroom fixtures at the Community Centre include stainless-steel lavatories, a wall-mounted vitreous china lavatory, flush tank vitreous china toilets, and wall-mounted vitreous china urinals.		-	Community Centre: The washroom fixtures are reported to be replaced on an ongoing basis. No major replacements of the washroom fixtures are anticipated within the evaluation period.
		<b>Pool</b> (~2008): Washroom fixtures at the Pool include wall-mounted vitreous china lavatories,			<b>Pool:</b> The lavatory in the Men's Washroom near the main entrance is damaged and should be replaced (see Note <b>6A</b>



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		counter-mounted stainless-steel lavatories, flush tank vitreous china toilets, and wall-mounted vitreous china urinals.			below). The washroom fixtures are reported to be replaced on an ongoing basis. No major replacements of the washroom fixtures are anticipated within the evaluation period. Many of the fixtures are not Barrier free compliant. See Item A10.1
M02.11	Sinks	Community Centre (1976): An enameled steel service sink is provided at the northeast Janitor's Room. A plastic mop sink is provided at the southwest Janitor's Room. (~2000): Counter-mounted stainless-steel sinks are provided at the Kitchen, Bar, and Meeting Rooms.  Pool (1987): A counter-mounted stainless-steel sink is provided at the First Aid Room.	4	С	Community Centre: The service sinks are in acceptable condition, but have surpassed their EUL and should be replaced within the evaluation period.  Pool: The sink is original and is approaching the end of its EUL. It is recommended to replace the sink when the counters and cabinets are replaced (see Note 6A below.
		Community Centre: Not present.			Community Centre: N/A
M02.12	Showers	<b>Pool (1987):</b> Communal built-in tiled showers with integral valves are located at the Change Rooms.	4	С	Pool: No concerns observed or reported.
M02.13	Drinking Fountains	Community Centre (~2013/2016): Wall-mounted drinking fountain is provided in the Fitness Room and adjacent corridor.  Pool (1987): A stainless-steel drinking fountain is located on the south elevation of the building.	4/5	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported. The fountain should be replaced with a barrier-free drinking fountain within the evaluation period (see Note 6A below).
		Community Centre: Not present.			Community Centre: N/A
M02.14	Water Pumps	<b>Pool (1987):</b> A number of electric pumps for the Pool and Whirlpool were noted and range from 2-to 7.5- horsepower.	3/4	С	<b>Pool:</b> It was reported that the Whirlpool pump occasionally overheats and fails. The pump is approaching the end of the EUL and likely requires replacement. Costing to



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					replace all pumps has been included in the Capital Reserve Table.
M02.15	Valves	Community Centre (~2008): Shut-off valves are provided at the interior plumbing fixtures. Hose bibbs are located at the exterior of the building.  Pool (~2008): Shut-off valves are provided at the interior plumbing fixtures. Hose bibbs are located at the exterior of the building.	4	-	Community Centre: The toilet shut-off valve at the southwest Women's Washroom is missing a handle, as is on the exterior hose bibbs. Handles should be replaced to maintain proper function of the valves (see Note 6A below). No other concerns observed or reported.  Pool: No concerns observed or reported.
M02.16	Water Treatment Systems	Community Centre: Not present.  Pool (~2008): The Pool water is filtered by vacuum media filtration tanks located in the Pool Equipment Room. Pool water is disinfected by a salt chlorination system.	4	-	Community Centre: N/A  Pool: No concerns observed or reported.

## M03.0 HEATING

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
M03.1	Rooftop Units	Community Centre: (~2006): Two Carrier-brand RTUs are located over the Hall. The data tags were not viewable at the time of assessment.  (~2015): One RTU is located over the Fitness Room. Technical specifications are provided below:	4		Community Centre: No concerns observed or reported.



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		Manufacturer: York Model Number: ZE048N10N1AAA4 Serial Number: N1K5038800 Heating Capacity: 100,000-BTU/hr Cooling Capacity: 4-tons  Pool: Not present.			Pool: N/A
M03.2	Unit Heaters	Community Centre: Not present.  Pool (~2008): The Mechanical Room and Pool Equipment room each have a suspended gas-fired unit heater. Both units are manufactured by Lennox International.	4	-	Community Centre: N/A  Pool: No concerns observed or reported.
M03.3	Furnaces	Community Centre: (~2000/~2017): Two Lennox-brand furnaces are located in the northeast Furnace Room and are each rated at 33,000-BTU/hr.  (~2017): Two Bryant-brand furnaces are located in the southwest Furnace Room and are each rated at 120,000-BTU/hr.  Pool: Not present.	4	С	Community Centre: The older furnace located at the northeast Furnace Room is expected to surpass its EUL within the evaluation period and should be replaced. No other concerns observed or reported.  Pool: N/A
M03.4	Electric Heaters	Community Centre (~1981): An electric heater is located in the suspended ceiling in the Foyer.  Pool (~1987): Electric baseboard heaters are provided at the Mechanical Room and Pool Equipment Room.	4	-	Community Centre: The heater was mostly concealed and not directly reviewed. No concerns observed or reported. It has surpassed its EUL and should be replaced. (See Note 6A below)  Pool: The baseboard heaters are in acceptable condition, but will require replacement at the end of the evaluation period.



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# M04.0 COOLING

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
M04.1	Rooftop Units	Community Centre (~2006/2015): Three RTUs are provided at the Community Centre which have heating and cooling capacities (see Item M03.1 above).		-	Community Centre: No concerns observed or reported.
		Pool: Not present.			Pool: N/A
M04.2	Condensers	Community Centre (~2006): One condenser unit is located on the roof over the Offices.  Manufacturer: Lennox Model Number: XC13-030-230-01 Serial Number: 5806A20311 Cooling Capacity: 2.5-tons	4	С	Community Centre: No concerns observed or reported.
		Pool: Not present.			Pool: N/A
		Community Centre: Not present.			Community Centre: N/A
M04.3	Evaporative Coolers	<b>Pool</b> (~2015): An evaporative cool, manufactured by Essick Air, is located on the roof.	4	-	Pool: No concerns observed or reported.



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# M05.0 VENTILATION

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
M05.1	Air Distribution	Community Centre and Pool (1976/1987): The HVAC forced-air systems are distributed throughout the buildings by galvanized metal ductwork concealed within the ceiling spaces.	4	-	Community Centre and Pool: No concerns observed or reported.
M05.2	Ventilation	Community Centre and Pool (1976/1987): Ventilation is provided by operable windows and louvers.	4	-	Community Centre: It was reported that the ventilation at the Hall and Offices is not sufficient. An allowance or an HVAC study, as well as a preliminary cost for repairs, has been included in the Community Centre Capital Reserve Table. It should be noted that the actual cost of repairs will depend on the results of the investigation.  Pool: No concerns observed or reported.
M05.3	Air Outlets & Inlets	Community Centre and Pool (1976/1987): Metal grilles are provided at the HVAC forced-air outlets.	4	-	Community Centre: No concerns observed or reported.  Pool: One exterior metal vent at the west elevation is damaged and should be replaced (see Note 6A below). No other concerns observed or reported.
M05.4	Exhaust Fans	Community Centre: (~2008): Exhaust fans are provided in the Washrooms. A range hood is located in the Kitchen. (~2016) A rooftop exhaust fan is located above the Fitness Room.  Pool (~1993): Exhaust fans are provided in the Washrooms and Change Rooms. The Mechanical Room and Pool Equipment Room each have one rooftop axial exhaust fan.	4	С	Pool: No concerns observed or reported.  Pool: No concerns observed or reported. Costing to replace the exhaust fans has been included in the Capital Reserve Table.



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# M06.0 FIRE PROTECTION

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
M06.1	Fire Hydrant	Community Centre and Pool (~1976): A fire hydrant is located on Site to the north of the buildings.		-	No concerns observed or reported.
M06.2	Fire Extinguishers	Community Centre and Pool (~2008): Portable dry-type ABC fire extinguishers are provided throughout the buildings. A K-class fire extinguisher is located in Community Centre Kitchen.	4	-	Community Centre and Pool: Inspections were observed to be up to date where reviewed. The extinguishes are expected to surpass their EUL within the evaluation period and should be replaced (see Note 6A below).
M06.3	Sprinklers	Community Centre and Pool: Not present.	-	-	Community Centre and Pool: N/A
M06.4	Chemical Fire Suppression	Community Centre (~2010): A wet chemical fire suppression system is provided at the range hood in the Kitchen.  Pool: Not present.		С	Community Centre: No concerns observed or reported.  Pool: N/A

# M07.0 CONTROLS

I.D	# SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
M07	.1 Electric and Electronic Controls	Community Centre: The building's HVAC systems are controlled by analogue and digital thermostats.			Community Centre: It was reported that there are temperature controls at the Community Centre. An allowance or an HVAC study, as well as a preliminary cost for repairs, has been included in the Community Centre Capital Reserve Table (and combined with Item M05.2 above). It should be noted that the actual cost of repairs will depend on the results of the investigation.



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	Pool (~2008): Analogue thermostats are used to control the heaters in the Mechanical Room and		Pool: No concerns observed or reported.
	Pool Equipment Room.		

#### M99.0 OTHER

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
M99.1	Humidifiers	Community Centre and Pool: Not present.	-	-	N/A
M99.2	De-humidifiers	Community Centre and Pool: Not present.	-	-	N/A

#### **NOTES:**

**6A)** The cost associated with repairs/replacement of this item is expected to fall below the Capital Threshold; as such, no costing has been included in the Capital Reserve Table.

#### **IMMEDIATE ITEMS IDENTIFIED:**

Community Centre:

No immediate work items identified.

Pool:

No immediate work items identified.

# **CAPITAL RESERVE ITEMS IDENTIFIED:**

**Community Centre:** 

M02.1) Replace Domestic Water Piping

M02.08) Replace Domestic Wastewater Piping

M02.11) Replace the Service Sinks

M03.4) Replace the Furnace.

M04.2) Replace the Condensing Unit.

M05.2) Repair the Ventilation and Temperature Control.

M06.4) Replace the Kitchen Extinguishing System

No other Capital Reserve Items above the threshold identified.

Pool:

M02.14) Replace the Pool Pumps.

M05.4) Replace the Exhaust Fans.

No other Capital Reserve Items above the threshold identified.



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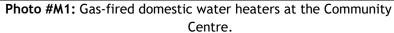
# **RECOMMENDED ADDITIONAL INVESTIGATION:**

RAI.4) HVAC Study (Community Centre).



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**Photo #M2:** From left to right, gas-fired Pool heaters, indirect Pool water heater, and tankless Pool water heaters.



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**Photo #M3:** Solar collectors on the roof of the Pool building.

Photo #M4: Typical vitreous china flush tank toilet.



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Photo #M5: Counter-mounted stainless-steel sink.

**Photo #M6:** Drinking fountain at the Community Centre.



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Photo #M7: Gas-fired RTU at the Community Centre.

Photo #M8: Gas-fired unit heater at the Pool.



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**Photo #M9:** Gas-fire furnaces at the Community Centre.

Photo #M10: Evaporative cooler and exhaust fan at the Pool.



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**Photo #M11:** Condenser units at the Community Centre.

Photo #M12: Kitchen fire suppression system.



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#### 7. ELECTRICAL

Electrical services are provided to both buildings via overhead conductors from a pole-mounted utility-owned transformer located between the buildings. Electricity usage is metered on the exterior of each building. All electrical equipment on Site was found to be 3-phase and 4-wire.

Primary electrical distribution at the Community Centre is handled by a 400-amp, 347/600-volt panelboard. Several secondary sub-panels rated at 225-amp, 120/208-volt are provided throughout the building. Interior lighting typically consists of tubular fluorescent lighting with localized incandescent lighting, controlled by line voltage switches and motion sensors. Exterior lighting consists of LED building-mounted fixtures on photocells. Emergency lights on battery packs and illuminated exit signs are provided throughout the building. Fire detection and alarm devices include a fire alarm control panel, smoke and heat detectors, pull stations, and fire alarm bells. Security systems include an intrusive detection system, surveillance cameras, and an exterior proximity card reader.

The main electrical disconnect switch at the Pool is rated at 400-amp, 240-volt. Secondary sub-panels rated at 225-amp, 120/240-volt located at the Mechanical Room. A motor control centre (MCC) is located at the Pool Equipment Room. Interior lighting consists of tubular fluorescent lighting controlled by line voltage switches and motion sensors. Exterior lighting consists of LED building-mounted fixtures on photocells. Emergency lighting on battery packs and one illuminated exit sign are provided at the Pool building. Security systems include an intrusive detection system and surveillance cameras.

Testing of the electrical systems such as coordination, balancing, ground fault relays, and complete infrared scanning of switches and panels shall be done as part of routine maintenance on an annually basis and all deficiencies rectified immediately.

The electrical components are in overall acceptable condition. Immediate action items with respect to the electrical distribution equipment, electrical outlets, and exit signs are required. Capital expenditures with respect to the Pool primary distribution panel, subpanels, and MCC, and the interior lighting, fire alarm control panel and devices, security systems, and audio equipment are anticipated within the evaluation period. Additional investigation is recommended with respect to an Arc Flash Hazard Analysis.

A detailed description of Site and building electrical systems/components including (if any) current, imminent or anticipated deficiencies above the Capital Threshold and excluding normal operating maintenance are presented below.



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# **E01.0 INCOMING SERVICES**

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
E01.1	Exterior Transformers	Community Centre and Pool: A pole-mounted exterior transformer is located to the east of the Community Centre and to the west of the Pool.		-	Community Centre and Pool: No concerns observed or reported.
E01.2		<b>Community Centre and Pool:</b> Power is fed from the exterior transformer to each building via overhead conductors.		-	Community Centre and Pool: No concerns observed or reported.
E01.3	Meters	Community Centre (1976): An exterior electrical meter is located at the east elevation.  Pool (1987): An exterior electrical meter is located at the west elevation.	5	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported.

# **E02.0 DISTRIBUTION EQUIPMENT**

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
E02.1	Primary Distribution (Switchgear, CDPs,	Community Centre (2014): The main electrical disconnect to the building is rated at 600-amps. A Siemens-brand main panelboard is located in the northeast Furnace Room. The unit is rated at 400-amp, 347/600-volt, 3-phase, 4-wire.			Community Centre: The Canadian Electrical Code (Part 1) requires that a clear area and access of not less than 1-metre to be maintained about electrical equipment at all times (Rule 2-308). Items were noted to be stored in front of the panelboard and should be removed. See Note 7A below.



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		<b>Pool (1987):</b> The main electrical disconnect switch is located in the Mechanical Room and is rated at 400-amp, 240-volt, 3-phase, 4-wire.			<b>Pool:</b> The main disconnect switch is in acceptable condition, but has surpassed its EUL and should be replaced within the evaluation period. See <b>Note 7A</b> below.
E02.2	Interior Transformers	Community Centre and Pool: Not present.	-	-	Community Centre and Pool: N/A
E02.3	Secondary Distribution (disconnects, splitters & sub-panels)	Community Centre (~2014/2016): Several Siemens-brand electrical sub-panels are located throughout the building and are typically rated at 225-amp, 120/208-volt, 3-phase, 4-wire. The sub-panels range in size from 24 to 42 circuits, and are at 70% to 100% capacity.  Pool (1987/~2008): Two electrical sub-panels were noted in the Mechanical Room. Both panels are manufactured by Square D and have ratings of 225-amp, 120/240-volt, 3-phase, 4-wire. Secondary disconnect switches were noted at the Mechanical Room and Pool Equipment Room.	2/4	A/C	Community Centre: The Canadian Electrical Code (Part 1) requires that a clear area and access of not less than 1 metre to be maintained about electrical equipment at all times (Rule 2-308). Items were noted to be stored in front of the sub-panels in the northeast Furnace Room and should be removed. Costing has been included with Item E02.1 above as it relates to floor clearances. No other concerns observed or reported.  Pool (1987/~2008): One panel appears to be original and is near full capacity. The second panel appears to have been installed more recently to allow for additional circuits and has plenty of additional space. The original panel is in acceptable condition, but has surpassed its EUL and should be replaced within the evaluation period.
E02.4	Motor Control Centres	Community Centre: Not present.  Pool (1987): A Square D MCC is located at the Pool Equipment Room and is rated at 600-amp, 120/208-volt, 3-phase, 4-wire.	4	С	Community Centre: N/A  Pool: The motor control centre is in acceptable condition, but has surpassed its EUL and should be replaced within the evaluation period.
E02.5	Branch Wiring	Community Centre and Pool (1976/1981/1987/2016): Electrical branch circuit wiring is reportedly copper throughout the buildings.		-	Community Centre and Pool: Concealed and not directly reviewed. No concerns observed or reported.
E02.6	Receptacles	Community Centre and Pool (1976/1981/1987/2016): Electrical receptacles are provided throughout the interior and exterior of the buildings.		A	Community Centre: The Canadian Electrical Code (Part 1) requires that receptacles located within 1.5-metres of sink, bathtub, or shower shall be protected by a ground fault circuit interrupter (GFCI) of the Class A type (sub rule 26-700). The receptacles near the sinks in the Kitchen and



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					Bar should be replaced with GFCI protection. No other concerns observed or reported.  Pool: No concerns observed or reported.
E02.7	Surge Protection	Community Centre and Pool: Not present.	-	-	N/A

# E03.0 LIGHTING

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
E03.1	Interior Lighting	Community Centre and Pool (1976/1981/1981/2016): The interior lighting primarily consists of recessed, surface-mounted, and suspended fluorescent lighting with T8 bulbs. Localized incandescent lighting fixtures are located at some areas.	4	С	Community Centre and Pool: Some of the fluorescent lighting fixtures are missing lens covers which should be replaced (see Note 7B below). The interior lighting is in acceptable condition, but has surpassed its EUL and should be replaced within the evaluation period. It is recommended to replace the fluorescent lighting with LED fixtures.
E03.2	Exterior Lighting	Community Centre and Pool (-2015): Exterior lighting consists of building-mounted LED fixtures.	5	-	Community Centre and Pool: The exterior lighting was reported to have been upgraded to LED fixtures circa 2015. No concerns observed or reported.
E03.3	Lighting Controls	Community Centre and Pool (1976/1981/1987/2016): Interior lighting is primarily controlled by line voltage switches, with motion sensors in the Washrooms. Exterior lighting is controlled by photocells.	4	-	Community Centre and Pool: No concerns observed or reported.
E03.4	Emergency Lighting	Community Centre and Pool (~2017): Emergency lighting consists of battery packs with integral lighting heads. Emergency lighting heads are also provided on the exit sign.		-	Community Centre and Pool: The inspection tags on the emergency lighting indicate the previous inspection was over a year prior to the time of this FCA review. It is recommended to have the emergency lighting inspected annually. No other concerns observed or reported.



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					Immediate item is created in the Pool capital reserve table to inspect Emergency Lighting for both buildings.
F02 F	Evit Liabtina	Community Centre: Illuminated exit signs are provided throughout the building.	2/4		Community Centre: Some of the exit signs were not illuminated at the time of review and should be repaired or replaced. Exit signs should be replaced with the international standard green "running man" pictogram signs as are currently used in the Fitness Room.
E03.5	Exit Lighting	<b>Pool (~2008):</b> One illuminated exit sign is provided at the building's main entrance.		A	<b>Pool:</b> The Pool area is enclosed with a fence which has two gates which can be used for egress in the event of an emergency. No signage was observed to indicate these exit areas. An allowance has been included as an immediate item in the Capital Reserve Table.

# E04.0 GROUNDING

	I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
_	E04.1	Grounding	Community Centre (1976): Concealed, but assumed to be present on major electrical equipment and conduit systems.  Pool (1987): Concealed, but assumed to be present on major electrical equipment and conduit systems.	5	-	Community Centre: No concerns observed or reported.  Pool: No concerns observed or reported.

**E05.0 FIRE ALARM** 



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I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
E05.1	Fire Alarm Panel	Community Centre (~2010): A FireShield Plus fire alarm control panel manufactured by Chubb Edwards is located in the Office Storage Room.  Pool: Not present.		С	Community Centre: The fire alarm control panel is in acceptable condition, but will surpass its EUL within the evaluation period.  Pool: N/A
E05.2	Devices	Community Centre (~2010): Fire detection and alarm devices include smoke and heat detectors, pull stations, and fire alarm bells.	4	С	Community Centre: The cover of the pull station in the Kitchen was not properly in place at the time of review and should be repaired (see Note 7B below). The fire detection and alarm devices should be replaced along with the fire alarm control panel at the end of its EUL. Costing has been combined with Item E05.1 above.
		Pool: Not present.			Pool: N/A
E05.3	Gas Detection	Community Centre: Not present.  Pool (1987): A decommissioned chlorine gas detection system is located in the Pool Equipment Room.		-	Community Centre: N/A  Pool: The Pool no longer uses a chlorine gas disinfecting system and has since switched to a chlorine salt system. The gas detection system is no longer in use and has been decommissioned and should be removed at a cost below the Capital Threshold.



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# E06.0 COMMUNICATIONS, DATA & SECURITY

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
E06.1	Telephone	Community Centre and Pool (~1990): Telephone services are provided to the buildings by Eastlink.	4	-	Community Centre and Pool: No concerns observed or reported.
E06.2	Internet Systems	Community Centre and Pool (~1990): Internet services are provided to the buildings by Eastlink.	4	-	Community Centre and Pool: No concerns observed or reported.
E06.3	Intrusive Systems	Community Centre and Pool (~2012): A security system is installed at both buildings which consists of motion sensors, door contacts, and a system control keypad. Glassbreak detectors are also provided at the Community Centre.	4	С	Community Centre and Pool: No concerns observed or reported. The security systems will surpass their EUL within the evaluation period and should be replaced. Costing to replace the systems at both buildings has been combined and included in the Community Centre Capital Reserve Table.
E06.4	Surveillance Systems	Community Centre and Pool (~2000): Surveillance cameras monitor the interior and exterior of both buildings. The monitoring/recording station is located at the Office Storage Room.	3	-	Community Centre and Pool: Some of the feeds were not displaying properly on the monitor at the recording station. It was reported that the surveillance systems are being replaced in 2018 and that no budgeting for replacement is required.
E06.5	Access Controls	Community Centre (2016): A proximity car reader provides access to the Fitness Room from the exterior.  Pool: Not present.		-	Community Centre: No concerns observed or reported.  Pool: N/A
E06.6	Audio Equipment	Community Centre (~2000): Wired speakers are provided at the Hall, with audio equipment located at one of the Mezzanines.  Pool: Not present.		С	Community Centre: The audio equipment is in acceptable condition, but has surpassed its EUL and should be replaced.  Pool: N/A



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#### E99.0 OTHERS

	I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
_	E99.1	Emergency Generators	Community Centre and Pool: Not present.	-	-	Community Centre and Pool: N/A

#### **NOTES:**

7A) The cost associated with repairs/replacement of this item is expected to fall below the Capital Threshold; as such, no costing has been included in the Capital Reserve Table.

**7B**) It is recommended to perform an Arch Flash Hazard Analysis (CSA Z462-12) on all electrical equipment throughout the building. The purpose of the study is to identify potential arc flash hazards prior to any work being performed on energized equipment. Warning labels will be affixed to the electrical equipment which provide recommendations for protective personal equipment (PPE), set boundaries for approaches, and establish safe work practices. Costing has been combined for both buildings and included in the Community Centre Capital Reserve Table. See **RAI.4** below.

#### **IMMEDIATE ITEMS IDENTIFIED:**

Community Centre:

Imm.2) Clear Space from Electrical Equipment.

Imm.3) Install GFCI Electrical Receptacles.

Imm.4) Inspect Emergency Lighting.

Imm.5) Repair/Replace Exit Signs.

Pool:

Imm.1) Inspect Emergency Lighting.

Imm.2) Repair/Replace Exit Signs.

# **CAPITAL RESERVE ITEMS IDENTIFIED:**

Community Centre:

E03.1) Replace the Interior Lighting.

E05.1) Replace the Fire Alarm Control Panel and Devices.

**E06.3**) Replace the Security System (Both Buildings)

E06.6) Replace the Audio Equipment.

No other Capital Reserve Items above the threshold identified.

Pool:

E02.1) Replace the Primary Distribution Panel.

**E02.3**) Replace the Electrical Sub-panel.

**E02.4)** Replace the Motor Control Centre.

E03.1) Replace the Interior Lighting.

E06.3) Replace the Security System.

No other Capital Reserve Items above the threshold identified.

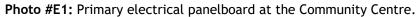
# **RECOMMENDED ADDITIONAL INVESTIGATION:**

RAI.5) Arc Flash Hazard Analysis.



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**Photo #E2:** Electrical distribution equipment at the Pool.



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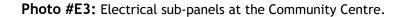
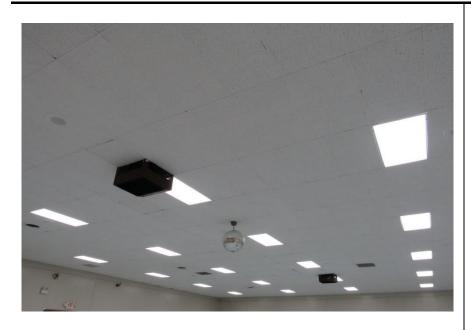




Photo #E4: Motor control centre at the Pool.



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**Photo #E5:** Interior fluorescent lighting at the Community Centre.

**Photo #E6:** Exterior LED lighting fixture at the Pool.



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Photo #E7: Exit sign and emergency lighting at the Pool.

Photo #E8: Fire alarm control panel at the Community Centre.



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Photo #E9: Surveillance camera at the Pool.

**Photo #E10:** Proximity card reader at the Community Centre.

FCA of Oliver Community Centre & Pool

Project No.: 20181842 Date: August 27, 2019

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# 8. HAZARDOUS MATERIALS REPORTS

No previous hazardous materials reports were made available for review. Based on the year of the construction of the Community Centre (1976), hazardous building materials such as asbestos-containing materials (ACMs), lead-based paints (LBPs), and polychlorinated biphenyls (PCBs) may be present. Based on the age of the Pool (1987), ACMs may be present. No suspect mould was observed at either building.



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# Report Signature Page

#### STEPHENSON ENGINEERING LTD.

Brian Levy, P.Eng.
Building Conditions Assessor
Field Reviewer/Report Author

Lawrence McSorley, Architect, AAA Associate - Building Science Senior Reviewer



# **APPENDIX A**Mandate & Report Resources



#### MANDATE AND REPORT RESOURCES

#### Authorization

Written Notice of Award of Request for Proposals Facility Condition Assessment of Oliver Community Centre & Pool was provided on October 18, 2018. An FCA of the Site identified in the Introduction section of the report was subsequently conducted. The Site is currently owned by Regional District of Okanagan Similkameen (RDOS) and is managed by the Oliver Parks and Recreation Society ("Society").

#### **Purpose**

The primary objective of the FCA was to visually examine and evaluate the present condition of the property elements, buildings and related structures. The FCA process is being undertaken to assist the Society in capital planning and evaluating the potential financial liabilities associated with the condition of the site elements, building and related structures on the sites. Stephenson Engineering understands that the Society will rely on the contents of this report for capital planning.

#### Scope

The FCA was conducted in general accordance with the American Society for Testing and Materials (ASTM) "Standard Guide for Property Condition Assessments: Baseline Property Condition Process E 2018-15", as locally applicable. The Stephenson Engineering Assessors (identified on the first page of the report) conducted the Site reconnaissance on the date shown. The Site reconnaissance was limited to a walk around the Site, a walk-through of the buildings and interview with personnel listed in the Introduction section of the report (referred to as the "Site Representative" in this report). Copies of selected photographs documenting conditions at the time of the visit are provided throughout the report.

The purpose of the report is to communicate identified physical deficiencies, future capital projects, and the associated opinions of estimated costs where the cost is greater than the Capital Threshold and expected to occur within the time frame used for the report. In accordance with this agreed mandate, assumptions were required to delineate between capital items and routine maintenance. Please refer to the "Operating and Maintenance Item" list below. Also, please refer to the attached "Discussions of Overall Concepts and Terminology" for additional explanation of assumptions used.

The review of the structural elements was limited to a visual review of the accessible, exposed portions of the buildings and related structures during our visit to the building. The roofs, walls, floors and ceilings were visually reviewed to collect information in this regard.

The review of the mechanical, electrical and fire safety systems was performed by non-specialists in conjunction with discussions with the Site Representative. A detailed assessment by a mechanical or electrical professional consultant should be conducted if further information regarding the condition, durability and/or expected future capital expenditures related to these systems is required.



Compliance with national and provincial building codes and/or fire codes is not part of the scope of this assessment.

The estimated costs outlined in this report are based on the conditions encountered and observations made during the reconnaissance. Estimates of quantities and areas are based on information supplied, field observations and/or interviews. Item repair/replacement costs are approximate only. Restoration costs are sensitive to local and overall economic factors and therefore, specific quotations from qualified contractors should be obtained when a specific deficiency is addressed or a capital project is to be implemented.

#### **Operating and Maintenance Items**

Stephenson Engineering assumes the following items will be maintained under normal operating budgets and are therefore not included in the Capital Reserve Table.

#### SITE

- Buried services
- Landscaping

#### **STRUCTURE**

Foundations and footings

#### **ROOF**

Periodic maintenance

#### WALLS AND WINDOWS

- Local periodic repairs and needle glazing
- Weather-stripping

#### **INTERIORS**

- Various common furnishings, specialty equipment
- Small residential appliances

#### **MECHANICAL**

- Motors, ductwork and in-duct equipment
- HVAC distribution piping
- Air inlets and outlets

#### **ELECTRICAL**

- Disconnects and breakers
- Overhead conductors

# DISCUSSIONS OF OVERALL CONCEPTS AND TERMINOLOGY

#### **Evaluation Period**

The period of evaluation used for this report is 10-years. Capital repairs and replacement that are reasonably expected to be required within this evaluation period and that cost in excess of the Capital Threshold are included in the Capital Reserve Table.

**Effective Age** 



The estimated age of a building component that considers actual age as affected by maintenance history, location, weather conditions, and other factors. Effective age may be more or less than actual age.

#### Expected Useful Life (EUL)

The average amount of time in years that an item, component or system is estimated to function without material repair when installed new and assuming routine maintenance is practiced.

#### Site Representative

Client, client's agent, or client-identified person or persons knowledgeable about the physical characteristics, maintenance, and repair of the subject property.

#### Remaining Useful Life (RUL)

A subjective estimate based upon observations, or average estimates of similar items, components, or systems, or a combination thereof, of the number of remaining years that an item, component, or system is estimated to be able to function in accordance with its intended purpose before warranting replacement. Such period of time is affected by the initial quality of an item, component, or system, the quality of the initial installation, the quality and amount of preventive maintenance exercised, climatic conditions, extent of use, etc.

#### Capital Threshold

The Capital Threshold used for this report is \$3,000. This threshold is used to determine whether a capital repair item is to be included in the Capital Reserve Table. Capital repairs identified and estimated to cost less than the threshold, or that will likely to be performed in phases, as a part of routine maintenance as required, at a cost less than the threshold are not included in the Capital Reserve Table.

#### Costs

Costs presented in this study for future capital repairs and replacement projects are our Opinions of Probable Budgets and are intended to include the work as per the description, taxes, permit fees, contingency and where appropriate, Engineering fees for design, specifications, tendering, project management and construction monitoring. We have generally assumed replacement will occur on a like-for-like basis except where obsolescence or technological advancements logically dictates an upgrade. More accurate costing in the future will require a condition assessment, choice and development of an appropriate repair option, designing and tendering the work to qualified contactors.

#### Recommended Work

Work that is required due to end of EUL, current condition, code or immediate health risks to keep the facility operating over the evaluation period of this report. This work is considered to be beyond normal or routine maintenance work or for maintenance procedures



that are currently not in force but are strongly recommended to maintain the system under consideration.

#### Immediate Items

Immediate repairs include deficiencies that require action in the next 60 to 90 days as a result of (i) existing or potentially unsafe conditions, (ii) negative conditions significantly impacting marketability or habitability, (iii) material building code violations, (iv) poor or deteriorated condition of a critical element or system, or (v) a condition that if left "as is" with extensive delay in addressing same, would result in or contribute to critical element or system failure within 12 months or a significant escalation in the repair cost.

Short Term Work (1 to 5 years)

Short term work includes work items that may not warrant immediate attention, but require repairs or replacement that should be undertaken on a priority basis in addition to routine preventive maintenance.

Mid Term Work (6 to 10 years)

Mid term work includes work items that require repair or replacement but do not have significant deficiencies or have not reached their EUL.

**Capital Reserve Analysis** 

The Capital Reserve Table includes a section that provides the average annual capital costs per square foot. Replacement Reserves include (i) deficiencies that may not warrant immediate attention, but require repair or replacement that should be undertaken on a priority basis over routine preventive maintenance work and (ii) components or systems that have realized or exceeded their Expected Useful Life (EUL) during the evaluation period (realization of EUL alone does not constitute an immediate repair). Replacement reserve costs are included in Appendices C and D.

Opinions of probable costs are provided for material physical deficiencies and not for repairs or improvements that could be classified as:

- Cosmetic or decorative;
- Part or parcel of a building renovation program or tenant improvement/finishes;
- Enhancements to reposition the asset in the marketplace;
- For warranty transfer purposes;
- Routine or normal preventative maintenance;
- Less than the capital threshold for this report; and
- Are expected to occur beyond the time frame of this report

**Cost Inflation Rate** 



We have presented the costs in current year (2019) values. We have used 3% in the capital reserve table attached. Further sensitivity analysis using other inflation assumptions should be tested when projecting future cash-flows.

#### Life Expectancies

Our estimates of the life expectancy of common element components, systems and subsystems are based on our opinion of the observed condition during our Site visit, experience with similar material at other buildings, published industry standards, articles and recommendations made by material suppliers and manufacturers. For some materials or systems, the history of use is not sufficient to predict life expectancy accurately. Monitoring and adjustments to the assumptions are required.

The year in which the capital work is required is estimated on the basis of the current observed conditions, or the construction methods and materials used. This may be shorter or longer than the remaining time in the standard estimated life cycle based on the current age of the item. Our estimates of life cycles reflect our understanding of the standards that the prudent long-term owners would maintain. Deferring and phasing of work is often possible keeping in mind that doing so could reduce building standards, increase disruption to residents, increase costs and risks.



# **APPENDIX B**

Limitations and Use of the Report

#### **LIMITATIONS**

This report is intended to provide an assessment of the property conditions at the subject property, at the time of the site visit. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third parties. Should additional parties require reliance on this report, Stephenson Engineering may be contacted to extend reliance to such parties. Stephenson Engineering disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs, which result from reporting the factual information contained herein.

The conclusions as presented represent the judgement of Stephenson Engineering based on the visual observations of the accessible, exposed building elements, supplemented by information and data obtained by Stephenson Engineering and discussions with the Site Representative and other representatives of the owner identified. Except as otherwise may be requested, Stephenson Engineering disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to Stephenson Engineering after the time during which Stephenson Engineering conducted the FCA. No physical testing or intrusive investigations were conducted, and no samples of building materials were collected to substantiate the observations made.

In evaluating the Site, Stephenson Engineering has relied in good faith on information provided by other individuals noted in this report. Stephenson Engineering in certain instances has been required to assume that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the Site Representative. Stephenson Engineering accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Actual costs may vary from the opinions of probable cost outlined by Stephenson Engineering. Factors affecting actual cost may include, but are not limited to, type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited, etc.

Stephenson Engineering makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation. These interpretations may change over time, thus any parties making use of this report should review these issues with appropriate legal counsel.

Should additional information become available with respect to the building elements or systems, Stephenson Engineering requests that this information be brought to our attention so that we may re-assess the conclusions presented herein.



# APPENDIX C Capital Reserve Table - Community Centre



Appendix C - Capital Reserve Table - Community Centre

#### Project Information

Total Gross Floor Area (m²)	1,550	Year Built	1976	Reserve Term (years	10
Number of Buildings	1	Age	43	Assumed Inflation	3%

#### **Identified Costs**

											Short Term					Mid Term			
Report	Building Component	Expected	Observed	Remaining	Unit Rate	Quantity	Recommended	Immediate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Section	<u> </u>	Useful Life	Age	Useful Life		·	Action	2019	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	ARCHITECTURAL																		
	Site																		
	Asphalt Pavement	25	22	3	\$20 /m²	1,500 m <sup>2</sup>	Replace				\$30,000								\$30,000
	Pavement Markings	8	4	4	\$16 /m	750 m	Repaint					\$12,000							\$12,000
	Concrete Pavement	40	42	5	\$125 /m²	400 m <sup>2</sup>	Replace						\$12,500			\$37,500			\$50,000
	Concrete Curbs	25	42	0	\$237 /m	40 m	Replace		\$9,500										\$9,500
	Site Drainage Study	-	-	-	Allow		Study		\$5,000										\$5,000
	Site Drainage Repair - Community Centre	-	-	-	Allow		Repair			\$40,000									\$40,000
A01.8	Site Drainage Repair - Pool	-	-	-	Allow	vance	Repair			\$40,000									\$40,000
	Irrigation	30	23	7	Allow	vance	Repair / Replace									\$10,000			\$10,000
	Retaining Wall (Concrete)	35	28	7	Allow	vance	Replace								\$3,000				\$3,000
A01.13	Retaining Wall (Wood)	30	28	2	Allow	vance	Replace			\$5,000									\$5,000
A01.21	Exterior Ramps and Stairs (Concrete)	40	42	0	\$696 /riser	10 riser	Replace		\$7,000										\$7,000
	Exterior Walls																		
A02.1	Metal Cladding	40	35	5	\$75 /m²	800 m <sup>2</sup>	Replace						\$60,000						\$60,000
A02.4	Joint Sealers	20	18	2	\$65 /m	500 m	Replace			\$32,500									\$32,500
A03	Exterior Windows																		
	Exterior Windows  Exterior Windows	40	42	0	\$685 /m²	22 m <sup>2</sup>	Replace		\$15,100										\$15,100
AU3.1	Exterior windows	40	42	U	\$000 /111-	22 111-	керіасе		\$15,100										\$15,100
A04	Exterior Doors																		
	Entrance Doors	30	42	0	\$7,106 each	2 unite	Donloop		\$21,300										\$21,300
	Utility Doors	40	35	5	\$1,472 each	3 units 19 units	Replace Replace		\$21,300				\$28,000						\$21,300
A04.3	Othity boors	40	33	5	\$1,472 eacii	19 units	керіасе						\$28,000						\$28,000
A05	Fascia and Soffits																		
	Metal Fascia	25	42	0	\$148 /m²	20 m²	Replace		\$3,000										\$3,000
A05.2		40	42	0	\$90 /m²	200 m <sup>2</sup>	Replace		\$18,000										\$18,000
7.00.2				Ů	<b>4707</b> 111	200	Портисс		\$107000										4.0/000
A06	Interior Walls and Partitions																		
	Fire Stop	-	-	_	Allow	vance	Code / Safety	\$1,000											
	Divider Curtain	30	25	5	\$267 /m²	30 m²	Replace	, ,					\$8,000						\$8,000
	Ceramic Tile	40	35	5	\$113 /m²	30 m <sup>2</sup>	Replace						\$3,400						\$3,400
	FRP Panels	30	20	10	\$115 /m²	70 m <sup>2</sup>	Replace											\$8,100	\$8,100
	Wall/Ceiling Paint	15	12	3	\$11 /m²	1,100 m <sup>2</sup>	Repaint				\$4,000			\$4,000			\$4,000	,	\$12,000
	J						, , , , , , , , , , , , , , , , , , , ,												, , , , , , ,
A07	Interior Doors and Windows																		
A07.1	Interior Doors	30			Allow	vance	Replace						\$8,000					\$8,000	\$16,000
A07.2	Interior Fire Doors	30	25	5	\$1,500 each	4 units	Replace						\$6,000						\$6,000
	Ceilings	6-	40		A74 / 0	200	<b>D</b> .		44.000										444.555
A08.1	Acoustic Ceiling Tiles	25	42	0	\$71 /m²	200 m <sup>2</sup>	Replace		\$14,200										\$14,200
A09	Flooring																		
	Resilient Sheet Flooring	20	18	2	\$86 /m²	750 m²	Replace			\$64,500									\$64,500
	Carpet Flooring	15	10	5	\$69 /m²	50 m <sup>2</sup>	Replace			\$51,500°			\$3,500						\$3,500
1107.0	our pot i rooring	10	10		ψυ / / ΙΙΙ	JU 111	Коріасс					1	ψ5,500		1				Ψ3,300

Report		Expected	Observed	Remaining			Recommended			T	Short Term					Mid Term			
Section	Building Component	Useful Life	Age	Useful Life	Unit Rate	Quantity	Action	Immediate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
A10	Firstrings							2019	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	Fixtures Kitchen Appliances	20	18	2	Allow	Vance	Replace			\$8,000									\$8,000
A10.10	Kitchen Appliances	20	10	2	Allov	Varice	Керіасе			\$6,000									\$6,000
A11	Barrier Free																		
	Barrier-Free Study				Allov	vance	Study		\$8,000										\$8,000
	Barrier-Free Interior Circulation Upgrades					vance	Upgrade		+3/255	\$15,000									\$15,000
	Barrier-Free Washroom Upgrades				Allov	vance	Upgrade			\$40,000									\$40,000
R01	Roofing																		
	Metal Roof	40	42	0	\$75 /m²	1,700 m²	Replace		\$127,500										\$127,500
	SBS Modified Bitument Roof	25	37	0	\$101 /m²	30 m <sup>2</sup>	Replace		\$3,000										\$3,000
	Gutters and Downspouts	30	42	0	\$30 /m	250 m	Replace		\$7,500										\$7,500
A99	Other																		
	Hazardous Material Study				Allov	l vance	Study		\$15,000										\$15,000
	Asbestos Abatement					vance	Repair		\$13,000	\$25,000									\$25,000
							71.5			, ,,,,,,,									, .,
	STRUCTURAL																		
	Foundations																		
	No Capital Items Identified																		
S02	Floors on Grade																		
	No Capital Items Identified																		
S03	Suspended Floors and Stairs																		
	No Capital Items Identified																		
	No capital items identified																		
S04	Roof Structures																		
	No Capital Items Identified																		
	Interior Walls and Columns																		
	No Capital Items Identified																		
S06	Exterior Walls and Columns																		
	No Capital Items Identified																		
	Other																		
	No Capital Items Identified																		
6	MECHANICAL																		
	Site Services																		
	No Capital Items Identified																		
	Plumbing																		
	Domestic Water Piping	40	35	5	\$68 /m²	1,550 m <sup>2</sup>	Replace						\$105,400						\$105,400
	Domestic Wastewater Piping Service Sinks	40 30	35 25	5	\$70 /m <sup>2</sup> \$3,708 each	1,550 m <sup>2</sup> 2 units	Replace Replace						\$108,500 \$7,400						\$108,500 \$7,400
IVIOZ. I I	JOI VICE JIIIKS	30	20	3	ψ5,700 CaCII	2 units	Керіасе						Ψ1,400						Ψ1,400
	Heating																		
M03.4	Furnaces	18	13	5	\$4,000 each	1 unit	Replace						\$4,000						\$4,000
MC 4	Casling																		
	Cooling Condensing Units	20	12	8	\$4,400 each	1 unit	Replace									\$4,400			\$4,400
IVIUT.Z	condensing onits	20	12	U	ΨΨ, TOO CUCII	i uiit	Періасе									Ψ+,+00			Ψ1,Τ00
	Ventilation																		
	HVAC Study	-	-	-	Allov		Study		\$5,000										\$5,000
M05.2	Ventilation and Temperature Control	-	-	-	Allov	vance I	Repair			\$50,000									\$50,000
M06	Fire Protection																		
	Kitchen Extinguishing System	15	8	7	\$4,175 each	1 unit	Replace						<b></b>	<u> </u>	\$4,200				\$4,200

Oliver Parks and Recreation Society Oliver Community Centre 665 McKinney Road, Oliver, BC



	- FNGINEEI										Short Term	ocommondod									
Report	Building Component	Expected Useful Life	Observed	Remaining Useful Life	Unit Rate	Quantity		Immediate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total		
Section	• •	Userui Lire	Age	Userui Lire			Action	2019	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
M07	Controls																				
	No Capital Items Identified																				
M99	Other																				
	No Capital Items Identified																				
_																					
7	ELECTRICAL																				
E01	Incoming Services																				
	No Capital Items Identified																				
F00	Distribution Fundament																				
	Distribution Equipment  Clear Space from Electrical Equipment				Allan		Code	\$500													
DAL 4	Arc Flash Hazard Analysis	-	-	-	Allow		Study	\$500	\$15,000										\$15,000		
	GFCI Electrical Receptacles	-	-	-	Allow		Code / Safety	\$1,000	\$15,000										\$15,000		
1111111.3	Gi di Liedi idai Receptacies	-	-	-	Allow	varice	Code / Salety	\$1,000													
E03	Lighting																				
		20	15	5	\$388 each	210 units	Replace						\$81,500						\$81,500		
	Emergency Lighting	-	-	-	Allow		Upgrade	\$500					+0.1,000						421,222		
	Exit Signs	-	-	-	Allow		Repair / Replace	\$1,500													
E04	Grounding																				
	No Capital Items Identified																				
	Fire Alarm					·					-				-		-				
E05.1	Fire Alarm Control Panel and Devices	15	8	7	Allow	/ance	Replace								\$15,000				\$15,000		
	Communications, Data & Security																				
	Security System	15	6	9	\$21 /m² GFA	475 m² GFA	Replace										\$10,000		\$10,000		
E06.6	Audio Equipment	10	5	5	Allow	vance	Replace						\$6,200						\$6,200		
F00	ou.																				
E99	Other																				
	No Capital Items Identified																				

Capital Reserve Analysis

Average Cost / Year / Sq. M.

Average Cost / Year

 Inflated
 Uninflated

 \$132,306
 \$119,070

 \$85.36
 \$76.82

**Total Costs** 

Totals (Uninflated)
Totals (Inflated)

\$4,500	\$274,100	\$320,000	\$34,000	\$12,000	\$442,400	\$4,000	\$22,200	\$51,900	\$14,000	\$16,100	\$1,190,700
\$4,500	\$282,323	\$339,488	\$37,153	\$13,506	\$512,863	\$4,776	\$27,303	\$65,745	\$18,267	\$21,637	\$1,323,061

BL LPM



# APPENDIX D

Capital Reserve Table - Pool



Appendix D - Capital Reserve Table - Pool

#### Project Information

Total Gross Floor Area (m <sup>2</sup> )	365	Year Built	1987	Reserve Term (years	10
Number of Buildings	1	Age	32	Assumed Inflation	3%

#### **Identified Costs**

Demont	F 1	01	D ! !-			D				Short Term					Mid Term			
Report Building Component	Expected	Observed	Remaining	Unit Rate	Quantity	Recommended	Immediate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Section Ballang component	Useful Life	Age	Useful Life		,	Action	2019	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
4 ARCHITECTURAL																		
A01 Site																		
A01.3 Asphalt Pavement	25	22	3	Allo	wance	Replace				\$10,000			\$10,000			\$10,000		\$30,000
A01.4 Pavement Markings	8	5	3	\$16 /m	188 m	Repaint				\$3,000			710,000			<b>+10,000</b>		\$3,000
A01.5 Concrete Pavement	25	20	5	\$125 /m²	80 m <sup>2</sup>	Replace				, , , , , ,		\$10,000						\$10,000
A01.10 Fencing	40	31	9	\$113 /m	100 m	Replace										\$11,300		\$11,300
A01.11 Pool	35	31	4	Allov	vance	Repair					\$200,000							\$200,000
A01.12 Retaining Wall (Concrete)	35	28	7	Allov	wance	Replace								\$10,000				\$10,000
A01.16 Pedestrian Bridges	35	30	5	\$1,200 /m²	25 m <sup>2</sup>	Replace						\$30,000						\$30,000
A01.20 Shed	30	25	5	Allov	vance	Replace						\$5,000						\$5,000
A02 Exterior Walls																		
A02.1 Metal Cladding	40	31	9	\$75 /m²	160 m²	Replace										\$12,000		\$12,000
A02.4 Joint Sealers	20	31	0	\$65 /m	80 m	Replace		\$5,200								, ,		\$5,200
A02.8 Awning	40	31	9		vance	Replace										\$12,500		\$12,500
A03 Exterior Windows																		
No Capital Items Identified																		
A04 Exterior Doors																		
A04.1 Entrance Doors	30	25	5	\$4,472 each	1 unit	Replace						\$4,500						\$4,500
A04.3 Utility Doors	40	31	9	\$1,472 each	8 units	Replace										\$11,800		\$11,800
A05 Fascia and Soffits																		<u> </u>
No Capital Items Identified																		
A06 Interior Walls and Partitions																		
A06.5 Ceramic Wall Tile	40	31	9	\$113 /m²	40 m <sup>2</sup>	Replace										\$4,500		\$4,500
A06.8 Wall Paint	15	12	3	\$11 /m²	550 m <sup>2</sup>	Replace				\$3,000				\$3,000				\$6,000
A07 Interior Doors and Windows																		
A07.1 Interior Doors, Swinging	30			Allov	vance	Replace						\$3,000					\$3,000	\$6,000
A07.2 Interior Fire Doors	30	25	5	\$1,500 each	2 units	Replace						\$3,000						\$3,000
A08 Ceilings																		
A08.1 Acoustic Ceiling Tiles	25	31	0	\$71 /m²	50 m <sup>2</sup>	Replace		\$3,600										\$3,600
A09 Flooring																		
A09.1 Ceramic Tile Finish	40	31	Q	\$112 /m²	350 m <sup>2</sup>	Replace										\$39,200		\$39,200
A09.9 Floor Paint	15	31	0	\$50 /m <sup>2</sup>	90 m <sup>2</sup>	Repaint		\$4,500								ψ37,200		\$4,500
707.7 Hoor Funt	13	31	J	<del>400</del> / III	70 111	Керапіі		ψτ,300										Ψ4,300
A10 Fixtures								_										
A10.1 Counters and Cabinets	35	31	4	\$1,033 /m	12 m	Replace					\$12,400							\$12,400
A10.2 Lockers	30	31	0	\$92 each	92 units	Replace		\$8,500										\$8,500
A10.3 Toilet Partitions	30	31	0	\$937 each	10 units	Replace		\$9,400										\$9,400
A10.6 Change Room/Viewing Benches	35	31	4	\$1,912 each	10 units	Replace					\$19,100							\$19,100



Report		Expected	Observed	Remaining			Recommended	lara P. C		l v -	Short Term		T v =			Mid Term	V -		
Section	Building Component	Useful Life	Age	Useful Life	Unit Rate	Quantity	Action	Immediate 2019	Year 1 2019	Year 2 2020	Year 3 2021	Year 4 2022	Year 5 2023	Year 6 2024	Year 7 2025	Year 8 2026	Year 9 2027	Year 10 2028	Total
A11	Barrier Free							2017	2017	2020	2021	2022	2023	2024	2023	2020	2021	2020	
	Barrier-Free Interior Circulation Upgrades	_	_	_	Allow	ance	Upgrade			\$7,000									\$7,000
	Barrier-Free Washroom Upgrades	-	_	-	Allow		Upgrade			\$80,000									\$80,000
7111.1	Darrier 1100 Washi oom opgrades				Amen	unco	Opgrade			Ψ00,000									400,000
R01	Roofing																		
R01.2	Built-up Bituminous	25	20	5	\$120 /m²	365 m <sup>2</sup>	Replace						\$43,800						\$43,800
A99	Other																		
RAI.1	Hazardous Material Study				Allow	ance	Study		\$8,000										\$8,000
	Asbestos Abatement				Allow		Repair			\$25,000									\$25,000
	STRUCTURAL																		
S01	Foundations																		-
	No Capital Items Identified																		
S02	Floors on Grade																		
	No Capital Items Identified																		
S03	Suspended Floors and Stairs																		<u> </u>
	No Capital Items Identified																		
S04	Roof Structures																		
304	No Capital Items Identified																		
S05	Interior Walls and Columns																		
	No Capital Items Identified																		
507	Futorian Walls and Calumans																		
S06	Exterior Walls and Columns																		
	No Capital Items Identified																		
S99	Other																		
	Structural Study	-	-	-	Allow	ance	Study		\$8,000										\$8,000
6	MECHANICAL																		
M01	Site Services																		<b></b>
	No Capital Items Identified																		
M02	Plumbing																		
	Domestic water Piping	40	31	9	\$68 /m² GFA	365 m² GFA	Replace										\$24,800		\$24,800
M02.08	Domestic Wastewater Piping	40	31	9	\$70 /m² GFA	365 m² GFA	Replace										\$25,600		\$25,600
M02.12	Showers	30	25	5	Allow	ance	Replace						\$15,000						\$15,000
M02.14	Pool Pumps	20	18	2	\$7,870 each	4 units	Replace			\$31,500									\$31,500
MO2	Heating																		
M03.4	No Capital Items Identified	35	32	3	Allow	ance	Replace				\$3,000								\$3,000
100.1	no depital items facilities		02		Allow	unco	порисс				ψ3,000								Ψ3,000
MO4	Cooling																		
	No Capital Items Identified																		
MOF	Wasselfastan																		
	Ventilation Exhaust Fans	30	25	5	\$1,721 each	3 units	Replace						\$5,200						\$5,200
1003.4	EXIIdust Falis	30	23	5	\$1,721 eacii	3 units	керіасе						\$5,200						\$5,200
M06	Fire Protection																		
	No Capital Items Identified																		
M07	Controls  No Conital Itams Identified																		
	No Capital Items Identified																		
M99	Other																		
	No Capital Items Identified																		

Oliver Parks and Recreation Society Oliver Pool 665 McKinney Road, Oliver, BC



	FNGINEER	ING						Short Term Mid Term											
Report Section	t Building Component n	Expected Useful Life	Observed Age	Remaining Useful Life	Unit Rate	Quantity	Recommended Action	Immediate				Year 5	Year 6 Year 7 Year 8 Year 9 Year 10			Total			
								2019	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
7	ELECTRICAL																		
E01	Incoming Services																		
	No Capital Items Identified																		
E02	Distribution Equipment																		
E02.1	Primary Distribution Panel	30	25	5	\$6,571 each	1 unit	Replace						\$6,600						\$6,600
E02.3	Sub-panel	30	25	5	\$3,706 each	1 unit	Replace						\$3,700						\$3,700
E02.4	Motor Control Center	30	25	5	\$3,069 each	1 unit	Replace						\$3,100						\$3,100
E03	Lighting																		
E03.1	Interior Lighting	20	15	5	\$388 each	80 units	Replace						\$31,000						\$31,000
	Emergency Lighting				Allow		Upgrade	\$500											
lmm.2	Exit Signs	-	-	-	Allow	ance	New Install	\$2,000											
E04	Grounding																		
201	No Capital Items Identified																		
	The depiter from the first from																		
E05	Fire Alarm																		
	No Capital Items Identified																		
E06	Communications, Data & Security																		
E06.3	Security System, Intrusion Detection	15	6	9	\$21 /m² GFA	285 m² GFA	Replace										\$6,000		\$6,000
E99	Other																		
	No Capital Items Identified																		

Capital Reserve Analysis

Average Cost / Year / Sq. M.

Average Cost / Year

Inflated Uninflated

\$90,990 \$78,880 \$249.29 \$216.11 **Total Costs** 

Totals (Uninflated) Totals (Inflated)

\$2,500	\$47,200	\$143,500	\$19,000	\$231,500	\$163,900	\$10,000	\$13,000	\$0	\$157,700	\$3,000	\$788,800
\$2,500	\$48,616	\$152,239	\$20,762	\$260,555	\$190,005	\$11,941	\$15,988	\$0	\$205,763	\$4,032	\$909,901

BL LPM