

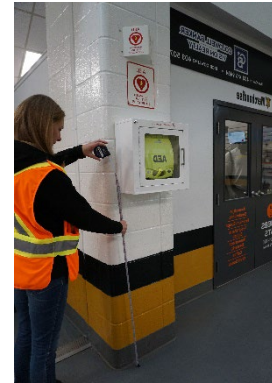
TOWN OF OLDS
**OLDS SPORTSPLEX
FACILITY LIFECYCLE ASSESSMENT
AND FEASIBILITY STUDY**
PRESENTATION

What was included as part of our review?

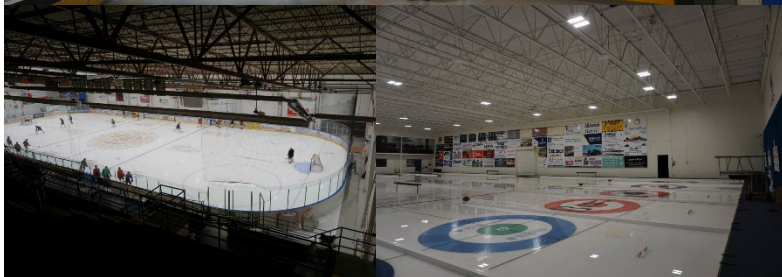
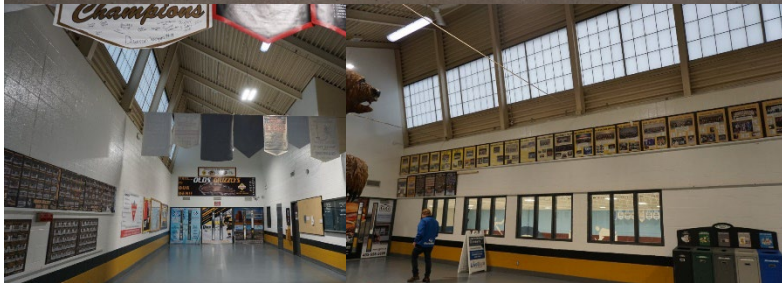
- ▶ Completed a Facility Lifecycle Assessment (FLA) to better understand the necessary capital investments needed to upkeep the facility in its current configuration over the next 30 years.
- ▶ Facility Lifecycle Assessment included: Architectural, Site, Structural, Mechanical, and Electrical components.
- ▶ Considers both needed repairs, maintenance and life cycle replacements.
- ▶ Consideration of changes to code since the time of construction as well as required upgrades were also included in assessment.
- ▶ Completed a separate barrier-free study, following Rick Hansen Foundation scoring system to identify deficiencies and necessary upgrades for the facility to comply with current accessibility requirements.
- ▶ Completed a facility needs assessment (program plan) to identify gaps in current program and required upgrades.

Data Collection Methodology

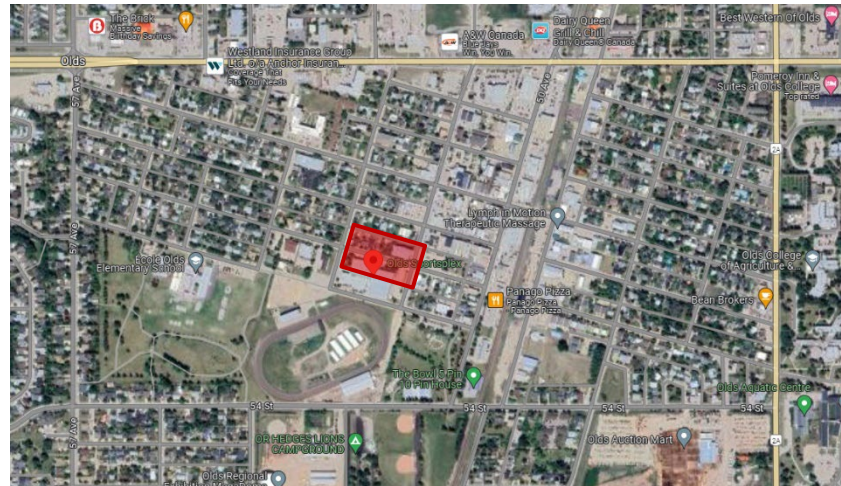
- ▶ Site Visits to the facility (completed on October 12th, 2023, and November 22nd, 2023)
- ▶ Interview was performed while on site related to current facility condition for the facility lifecycle report.
- ▶ Documentation of existing conditions for both facility lifecycle assessment report and barrier-free study.
- ▶ Interviews with main user groups to identify current and future space needs.



Facility Details



Building Name
Olds Sportsplex
Year of Construction
1979
Additions
None
Building Size
10,649 m ² (114,625 ft ²)
Site Size
3.5 Acres (1.4 Hectares)
Major Renovations
2010





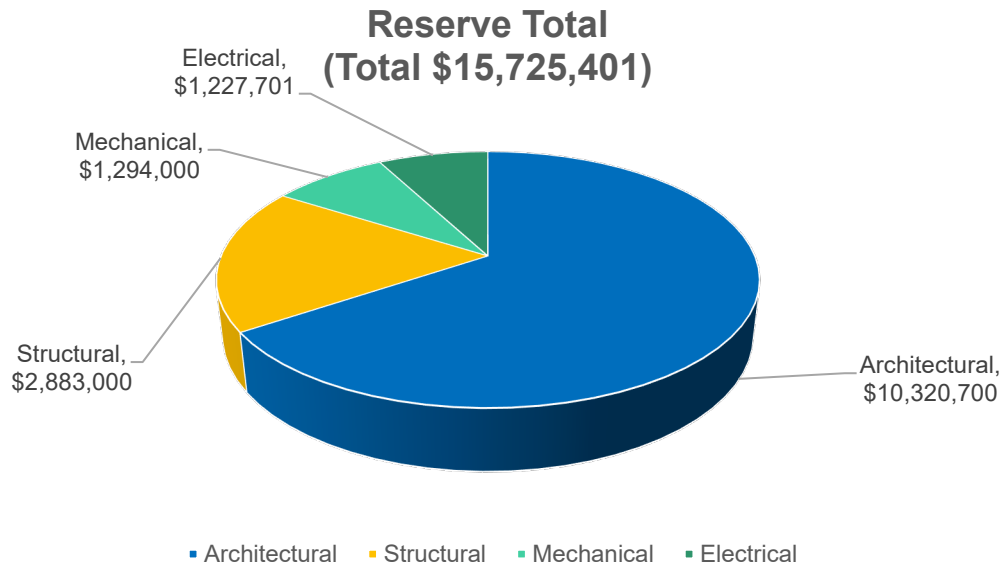
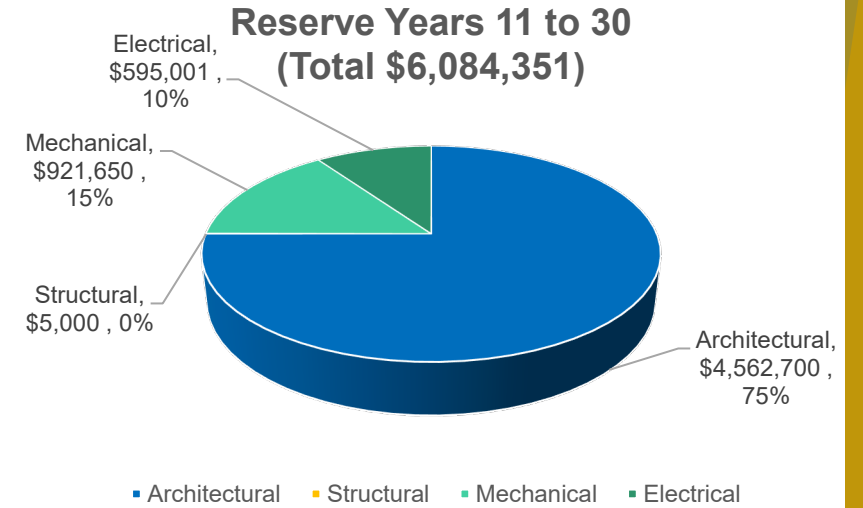
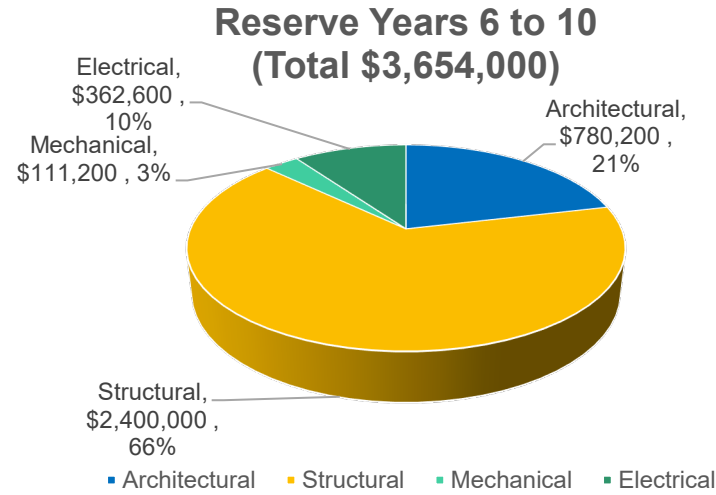
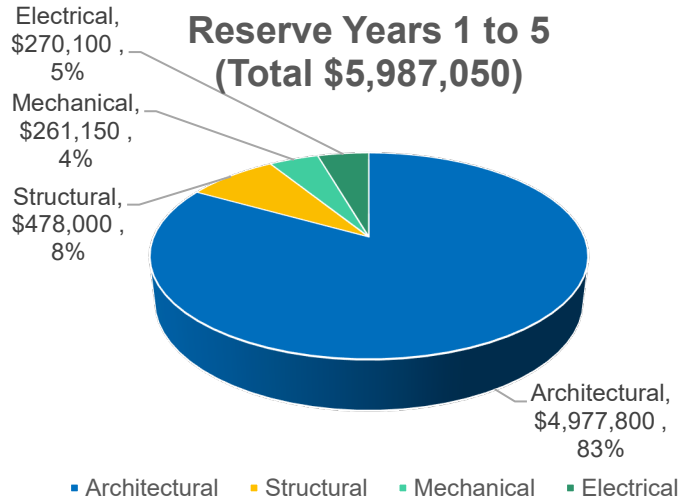
30-Year Facility Lifecycle Assessment Results

- ▶ Facilities require unique capital expenditures and maintenance items based on type and usage; however, a clearer trend can be established when analyzing the data altogether to see what type of work is required in the coming years (e.g., Architectural, Mechanical, Electrical, Structural).
- ▶ Due to the long timeline used in the assessment (30 years), many building components will require lifecycle replacement as they near the end of their expected useful life (EUL). Some components will potentially require replacement multiple times throughout the timeline of this report. The EUL of each component is established using industry data and helps predict the replacement of each component prior to component failure (which may result in a building having operational impacts).

Facility Lifecycle Assessment Results

Description	Immediate (2024)	Reserve Years 1 to 5 (2024 – 2028) Short Term	Reserve Years 6 to 10 (2029 – 2033) Mid Term	Reserve Years 11 to 30 (2034 – 2053) Long term	Total (Includes Immediate)
Total	\$108,300	\$5,987,050	\$3,654,000	\$6,084,351	\$15,725,401
Architectural	\$12,200	\$4,977,800	\$780,200	\$4,562,700	\$10,320,700
Structural	\$0	\$478,000	\$2,400,000	\$5,000	\$2,883,000
Mechanical	\$96,100	\$261,150	\$111,200	\$921,650	\$1,294,000
Electrical	\$0	\$270,100	\$362,600	\$595,001	\$1,227,701

30-Year Facility Lifecycle Assessment Results



Majority of capital expenditures throughout the 30-Year timeline focus on architectural upgrades such as exterior finishes, windows and doors, site paving, fixtures, etc, except for the 6 to 10 cycle which focuses on structural due to the ice slabs replacements. Expenditures also include lifecycle replacements for mechanical and electrical equipment.

Facility Condition Index (FCI)

- ▶ Using the replacement value of the facility and overall estimated deferred maintenance obtained from our Capital Reserve Table, an FCI was calculated, which was intended to assist the Town in establishing a benchmark on the relative condition of the facility, as well as to have a comparison point as to what is more cost effective:
 - Either maintaining the current facility
 - Or building a new facility

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

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

Next Steps – Overall FCI Ratings at 5-, 10-, 20- and 30-Year Mark

Estimated Replacement Value (2024 CAD\$)*		
\$ 60,365,920		
Year	Reserve Total <i>(Immediate Excluded)</i>	FCI Rating
5-Year	\$ 5,987,050	10%
10-Year	\$ 9,641,050	16%
20-Year	\$ 11,829,150	20%
30-Year	\$ 15,725,401	26%

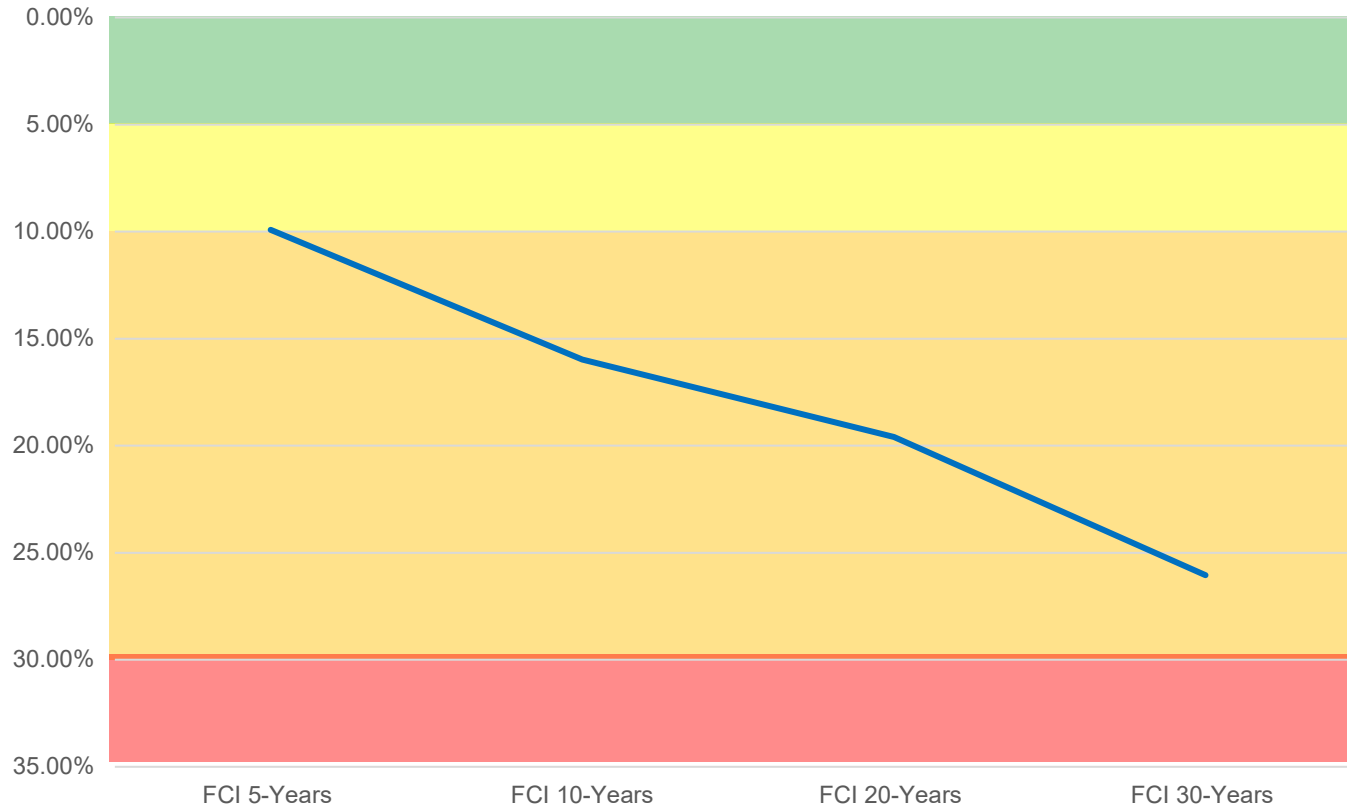
**Assuming a facility of the same size is constructed as a replacement facility at the same site location.*

FCI at the 10-, 20- and 30-Year mark has been calculated assuming no funding has been allocated the years prior to address recommended repairs/replacements.

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

Next Steps – Comparison with a 5-Year Outlook

FCI Trend (5-, 10-, 20- and 30-Year)



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

FCI at the 10-, 20- and 30-Year mark has been calculated assuming no funding has been allocated the years prior to address recommended repairs/replacements.

Priority Ratings – Initial Five Years

- As part of our review, priority ratings were assigned to repair/replacement items on the first 5-Years based on the year of required action:

Priority Rating	Description
1	Currently Critical - Immediate
2	Potentially Critical– Year 1 (2025)
3	Not Yet Critical – Years 3-5 (2026-2029)

Priority Items First 5 Years

PRIORITY 1

PR	Item No.	Item	Capital Expenditure	Action Year
1	Imm.1	Fire Stopping	\$10,000	2024
1	Imm.2	Fire Diagrams	\$200	2024
1	Imm.3	Roof Ladder	\$2,000	2024
1	Imm.4	Backflow Prevention	\$1,000	2024
1	Imm.5	Heat Exchanger	\$4,000	2024
1	Imm.6	Janitor Room Exhaust	\$4,000	2024
1	Imm.7	Ammonia Leak Detection	\$2,900	2024

PRIORITY 2

PR	Item No.	Item	Capital Expenditure	Action Year
2	A01.2	Parking Lot, Asphalt Paving	\$184,000	2025
2	A01.3	Parking Lot. Markings	\$7,900	2025
2	A01.5	Pedestrian, Pavement Curbs and Gutters	\$70,400	2025
2	A01.12	Exterior Signs	\$5,100	2025
2	A01.16	Handrails	\$45,800	2025
2	A01.17	Exterior Stair	\$46,200	2025
2	A01.18	Exterior Ramp (Vehicle)	\$24,100	2025
2	A03.1	Exterior Windows	\$12,500	2025
2	A05.2	Exterior Soffits	\$15,400	2025
2	A06.1	Fixed Partitions	\$15,400	2025
2	A09.7	Hardwood Decking Boards	\$24,500	2025
2	A09.8	Steel Drain Grates	\$5,600	2025
2	A10.10	Athletic Equipment	\$16,700	2026
2	R01.2	Roof, SBS	\$ 1,586,500	2025
2	RAI.1	Foundation Wall Study	\$ 5,000	2025
2	S01.2	Foundation Wall Crack Repairs	\$ 8,000	2025
2	S01.2	Foundation Wall Study Repairs	\$150,000	2025
2	S02.1	SOG Crack Repairs	\$5,000	2025
2	RAI.2	Snow Load Study	\$5,000	2025

PRIORITY 2 (CONT.)

PR	Item No.	Item	Capital Expenditure	Action Year
2	S04.1	Snow Load Repairs from Study	\$150,000	2025
2	RAI.3	Structural Study	\$5,000	2025
2	S05.2	Structural Repairs	\$150,000	2025
2	M02.9	Sanitary Sewage Pump	\$8,450	2025
2	M02.9	Storm Sump Pump	\$5,000	2025
2	M03.3	Hydronic Pumps	\$8,400	2025
2	M03.6	Baseboard Heaters	\$17,500	2025
2	M03.7	Hydronic Unit Heater	\$6,000	2025
2	RAI.4	Ventilation Study	\$4,000	2025
2	M05.5	Exhaust Fan	\$15,000	2025
2	M99.1	Refrigeration Pumps	\$4,800	2025
2	M99.7	Refrigeration Storage Tanks	\$9,000	2025
2	E02.1	Electrical Switchboards	\$38,500	2025
2	E02.2	Electrical Transformer	\$7,600	2025
2	E02.3	Electrical Safety Switches	\$1,200	2025
2	E02.4	Electrical Transformer	\$7,600	2025
2	E02.5	Electrical Safety Switches	\$10,600	2025
2	E02.6	Central Distribution Panels	\$11,700	2025
2	E02.8	Central Distribution Panels	\$4,100	2025
2	E02.8	Central Distribution Panels	\$12,900	2025
2	E02.10	Central Distribution Panels	\$5,900	2025
2	E02.12	Central Distribution Panels	\$5,900	2025
2	E02.13	Central Distribution Panels	\$5,900	2025
2	E02.14	Central Distribution Panels	\$5,900	2025
2	E02.17	Central Distribution Panels	\$5,900	2025
2	E02.18	Central Distribution Panels	\$5,900	2025
2	E02.16	Motor Control Centers	\$34,300	2025
2	E02.21	Electrical Branch Wiring	\$1,300	2025
2	E03.6	Exit Signs	\$31,200	2025
2	E06.4	Surveillance Video System	\$6,200	2025

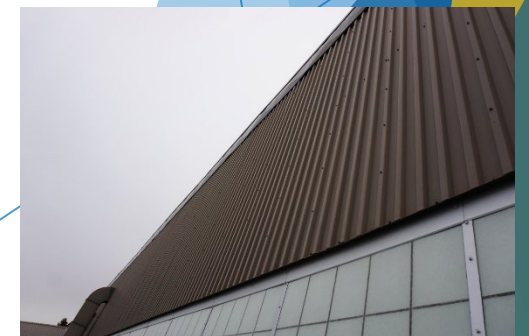
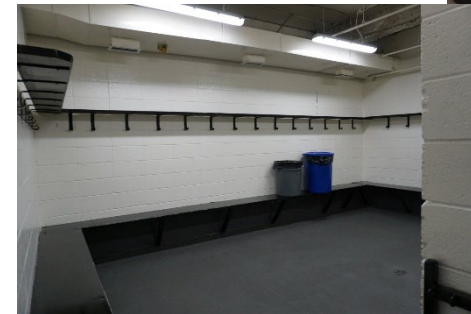
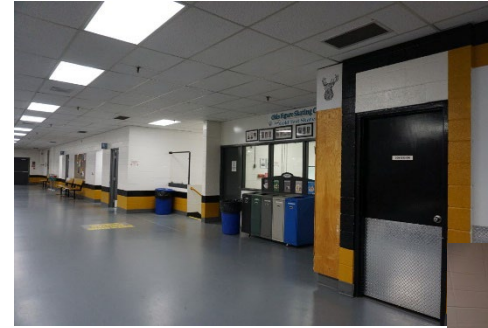
Priority Items First 5 Years

PRIORITY 3				
PR	Item No.	Item	Capital Expenditure	Action Year
3	A01.4	Pedestrian, Concrete Pavement	\$63,300	2029
3	A06.4	Interior Paint	\$340,800	2027
3	A07.1	Interior Doors	\$85,700	2027
3	A07.4	Interior Windows	\$53,200	2027
3	A09.5	Rubber Flooring	\$275,000	2029
3	A09.10	Floor Paint	\$62,500	2029
3	A10.3	Wood Bleachers	\$750,000	2029
3	A10.3	Wood Benches	\$16,100	2029
3	A10.3	Wood Benches	\$240,600	2029
3	A10.3	Plastic Benches	\$12,000	2029
3	A10.11	Display Cases	\$51,800	2029
3	A10.15	Residential Equipment	\$18,800	2029
3	A99.4	Barrier Free Upgrades	\$ 225,000	2027
3	M03.1	Boiler	\$ 7,000	2029
3	M05.3	Ventilation RTUs	\$52,500	2026
3	M99.2	Stream Filters	\$3,000	2029
3	M99.6	Refrigeration Oil Separators	\$3,000	2026



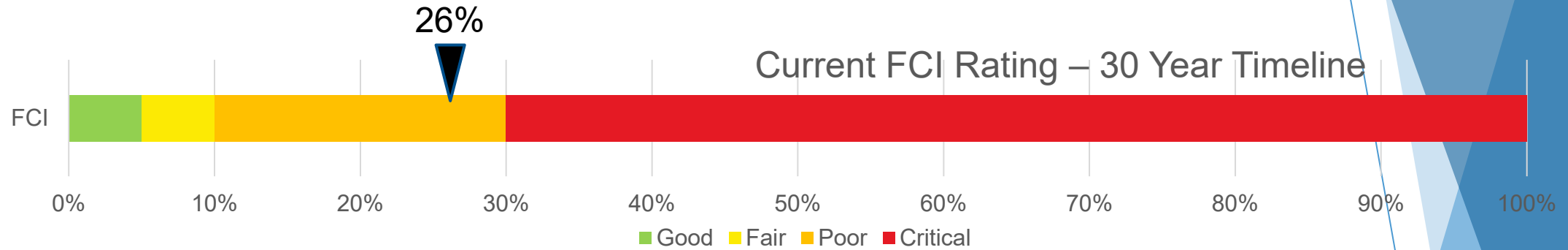
Take Aways

- ▶ 5-Year outlook is more realistic. Some items may be deferred to second round of assessments (Years 6-10)
- ▶ The building should be re-evaluated on a five-year cycle as some conditions can change over time.
- ▶ Need to consider the risk to the facility if items are deferred (Eg. Roof – High Risk, Vinyl flooring – Low)

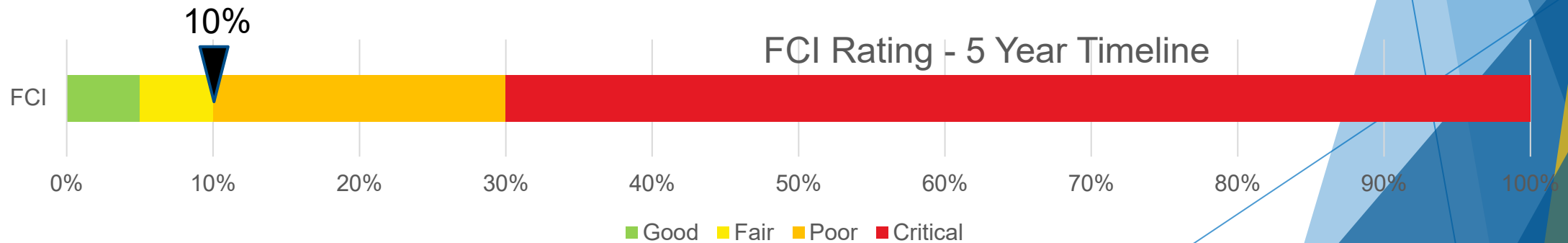


Next Steps – Comparison with a 5-Year Outlook

- ▶ The FCI rating of the building at 30 years vs the FCI rating for the first 5 years.



- ▶ Total capital expenditures for first 5 years = \$5,987,050
- ▶ FCI for first 5 years = $\$5,987,050 / \$60,365,920 = 10\%$

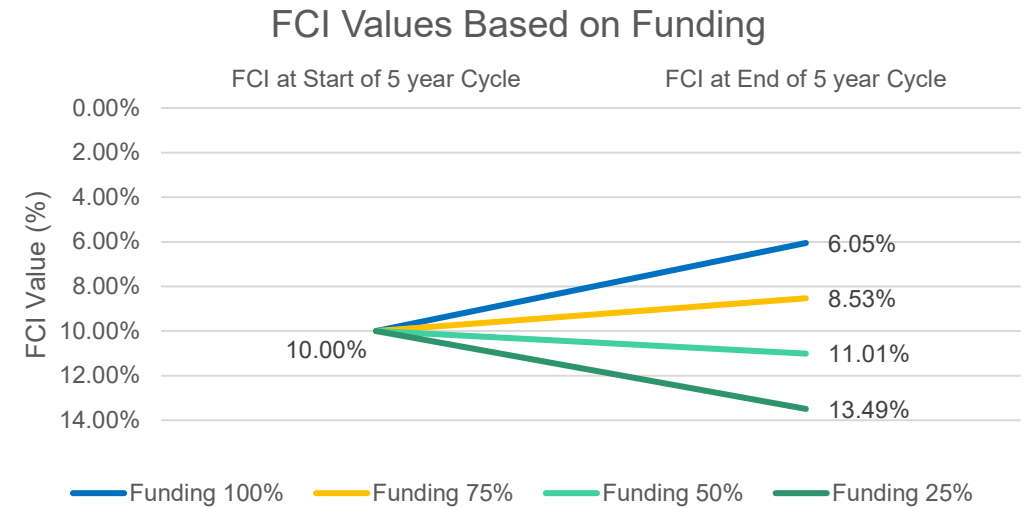


Funding Scenarios

- ▶ The total 5-Year FCI is 8%, with a total capital expenditures equaling \$4,218,350. The following chart depicts funding scenarios depending on whether all recommended capital expenditures are completed, or only a percentage of them are completed.
- ▶ Any items that are not completed are deferred to later years and carried forward into the next cycle (ex. next 5 years).
- ▶ 75% would be an ideal strategy to keep the facility in good condition.

Time Period	Percent Funding			
	100%	75%	50%	25%
Years 0-5	\$5,987,050	\$4,490,288	\$2,993,525	\$1,496,763
Years 6-10	\$3,654,000	\$5,150,763	\$6,647,525	\$8,144,288
Condition Rating After 5 Years	Fair	Fair	Poor	Poor

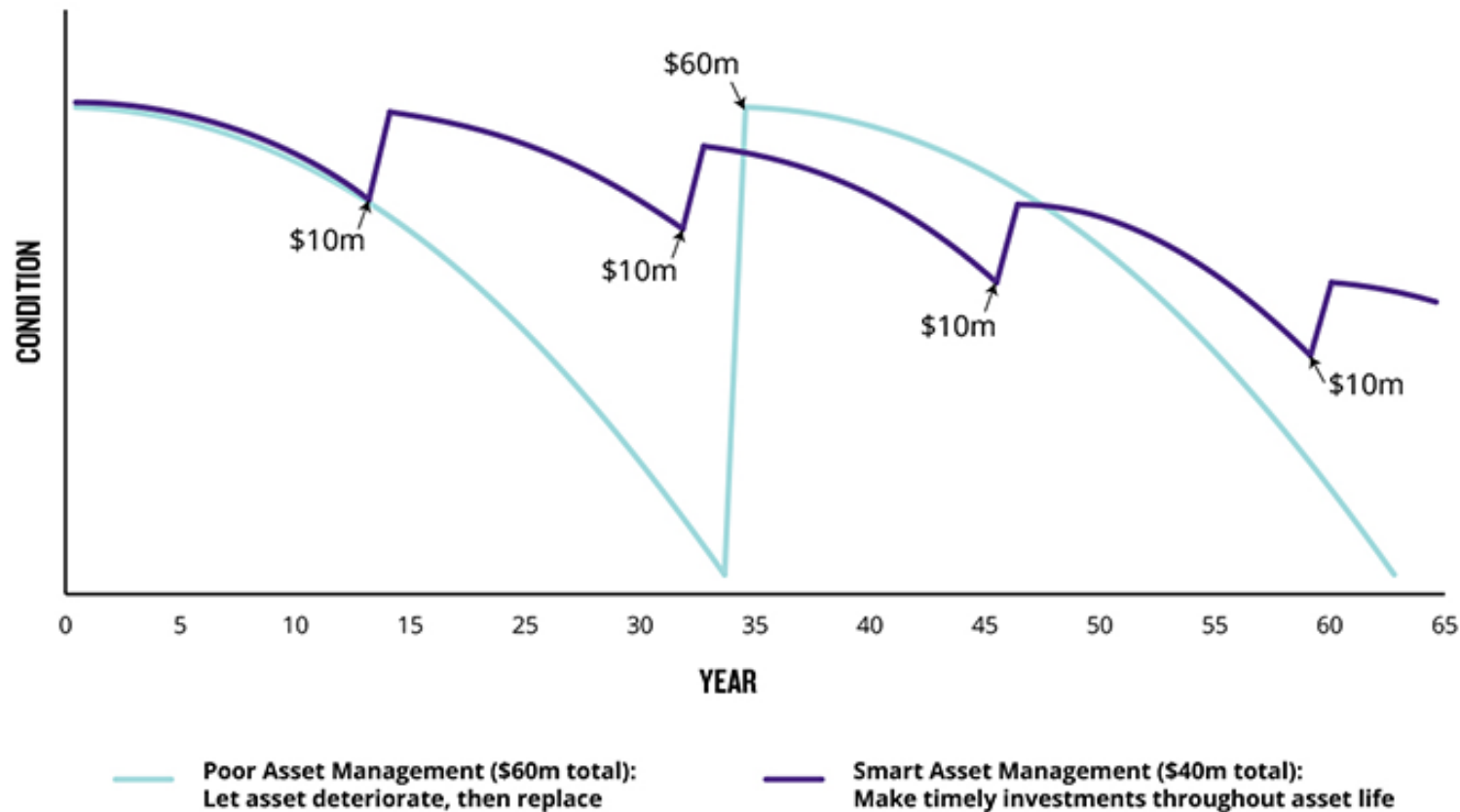
As deferred expenditures are pushed into the next 5-Year cycle, the overall FCI of the building deteriorates as compared to a 100% funding scenario where all expenditures completed.



The chart depicts the FCI values of the building at the start and end of the 5-Year cycle. A clear trend can be seen where the FCI values escalate faster in scenarios where the building is not funded, and expenditures are deferred.

Importance of Timely Investments

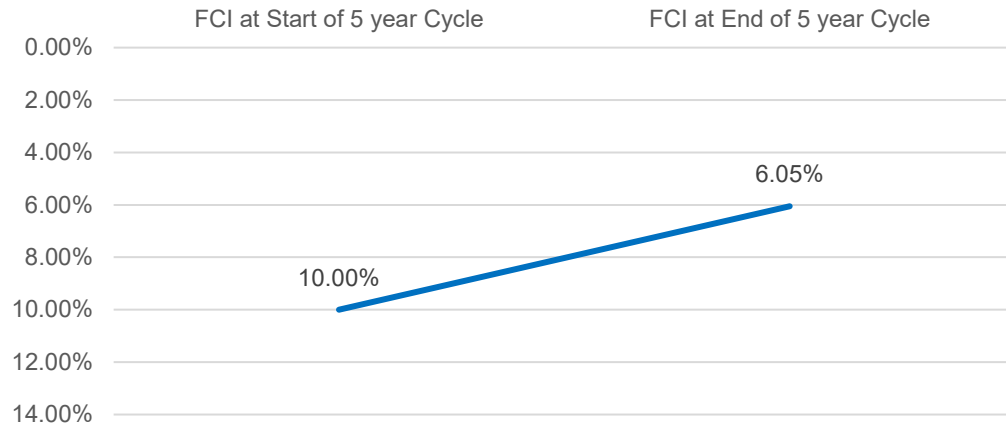
Figure 4: Small but Timely Renewal Investments Save Money



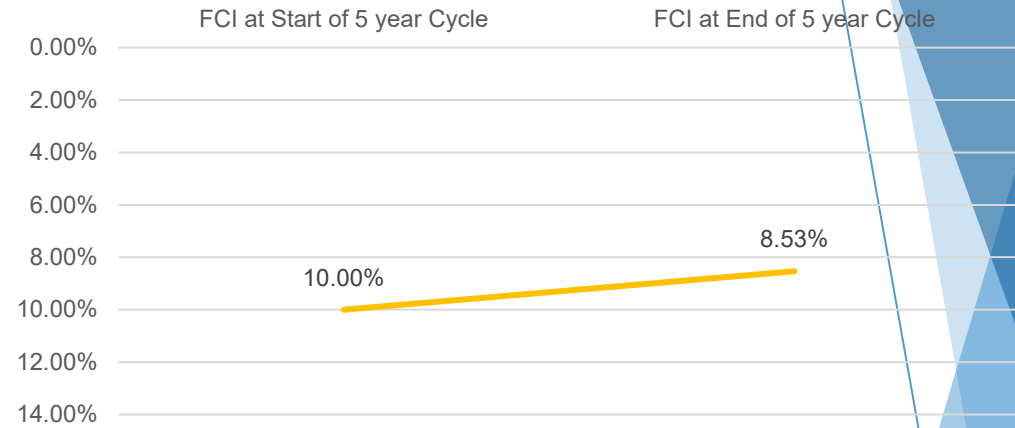
Impacts on the Average FCI at the Beginning and End of the Next 5-Year Cycle

► Based on funding scenarios where all capital expenditures are completed (100%), 75% completed, 50% completed and 25% completed.

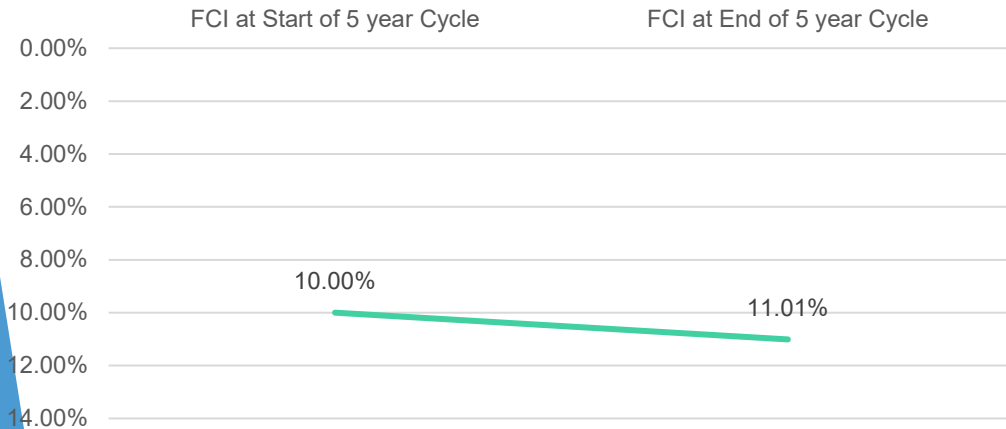
Average FCI - Funding 100%



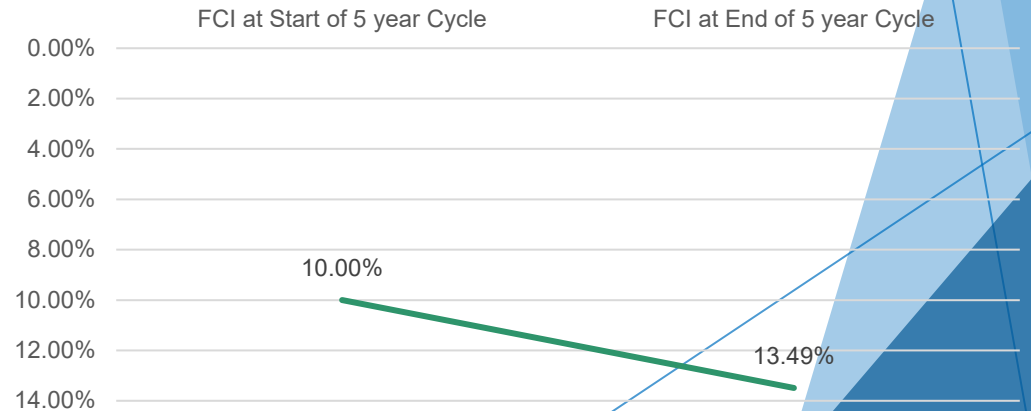
Average FCI - Funding 75%



Average FCI - Funding 50%



Average FCI - Funding 25%



Barrier-Free Study

- Reviewed accessibility compliance following the Rick Hansen Foundation (RHF) Rating Survey for Accessibility Certifications and the guidelines included in the **National Building Code – Alberta Edition 2023**. The areas below were reviewed:
 - Parking
 - Exterior Approach and Entrance
 - Interior Circulation
 - Interior Services and Environment
 - Sanitary Facilities
 - Wayfinding and Signage
 - Emergency Systems
- Observed deficiencies deemed the facility not accessible including parking, interior circulation, interior access to services, sanitary facilities and signage.
- Report provided priority ratings for observed deficiencies with costing.
- Order of magnitude cost to address all deficiencies identified is **\$1,907,357**, but only high priority items costing was rolled over into the capital reserve plan included with the facility lifecycle assessment (total of \$225,000).

Facility Needs Assessment (Program Plan)

- ▶ Conducted interviews with six main user groups (Olds Grizzlys, Olds College Broncos Olds Curling Club, Minor Hockey, Figure Skating Club, Lacrosse)
- ▶ Current auxiliary arena does not meet program requirements due to size. Requirement of a new full-size hockey arena was identified by five out of the six user groups.
- ▶ Other deficiencies include lack of adequate storage, office space and flex/multi-purpose spaces.
- ▶ Parking is currently limited and overflows during large events.
- ▶ Constrained site with limited room to grow within the existing boundaries without sacrificing parking.
- ▶ Number of change rooms inadequate, no options to meet new requirements for gender neutral user groups.
- ▶ Limited accessibility to the facility, basement level currently not wheelchair accessible which limits offerings for programs such as para-hockey.



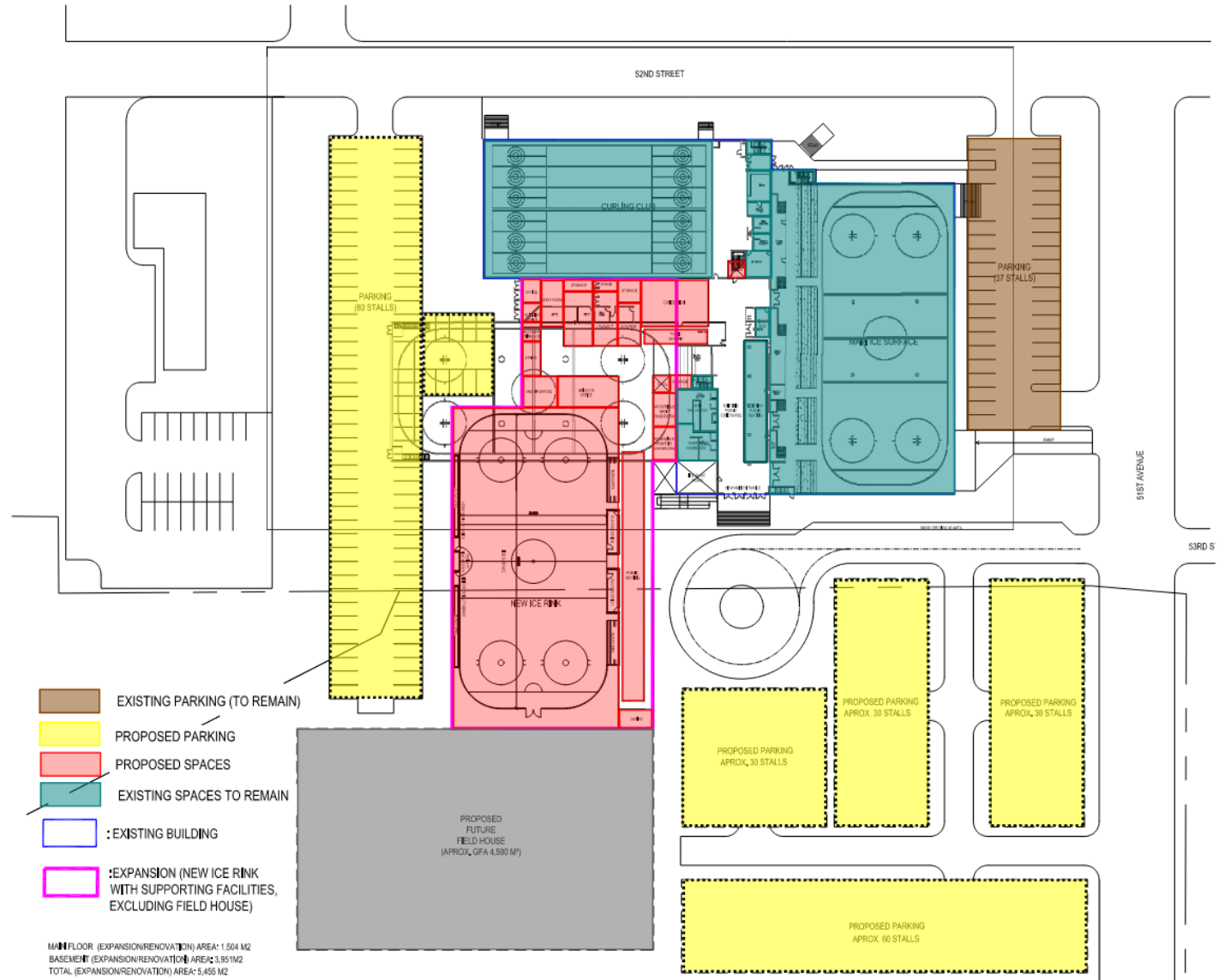
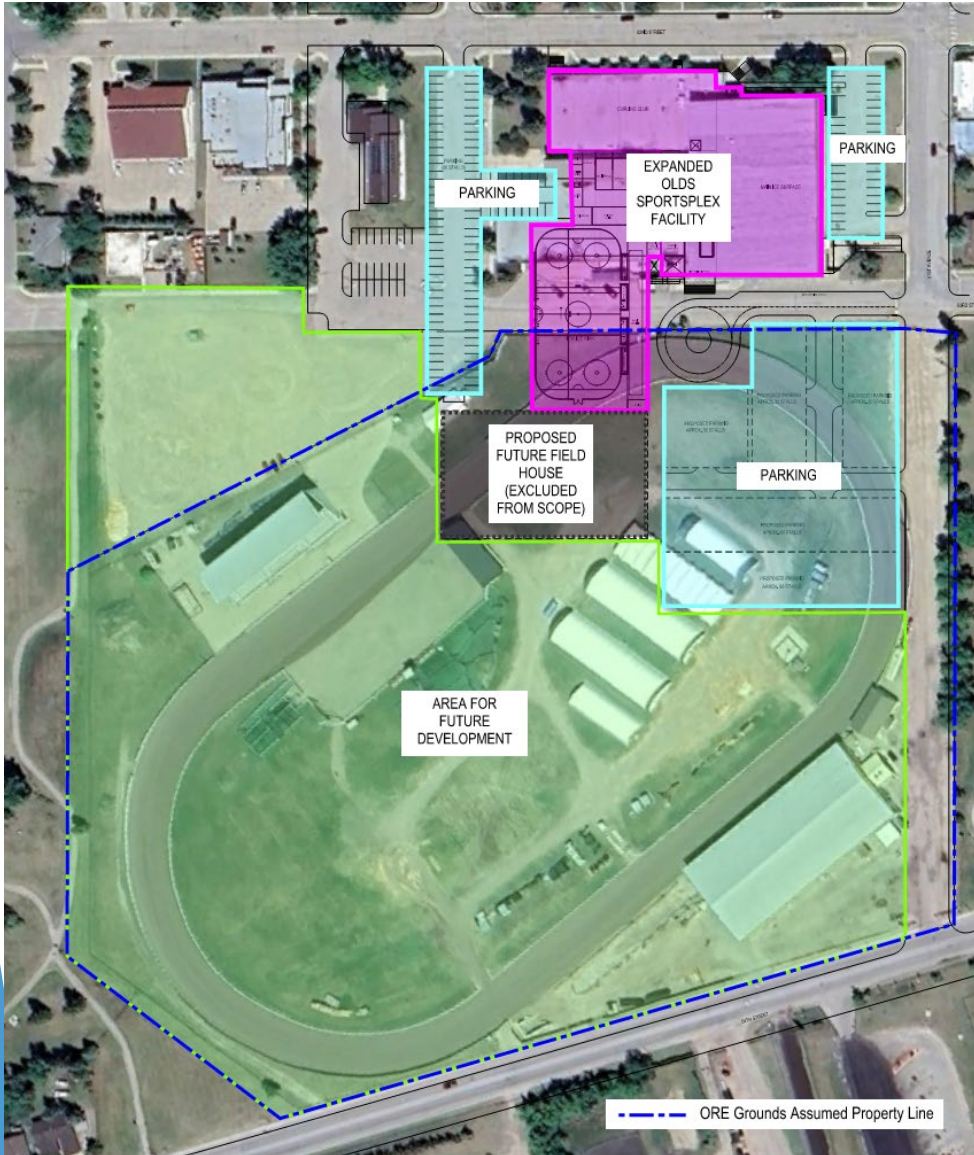
OLDS COLLEGE BRONCOS



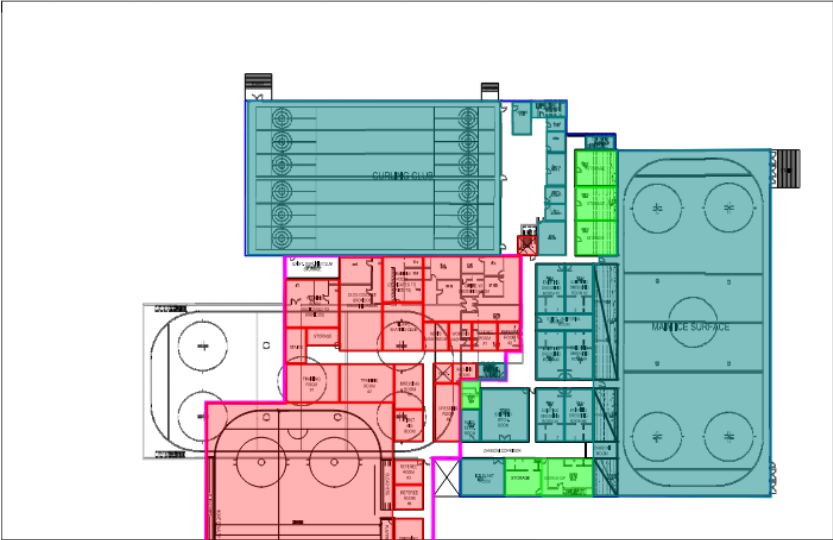
Olds Curling Club



Scenario #2 – Expansion (Site and Main Floor Plans)



Scenario #2 – Expansion (Second Floor Plan)



- EXISTING SPACE TO BE REPURPOSED
- PROPOSED SPACES
- EXISTING SPACES TO REMAIN
- : EXISTING BUILDING
- : EXPANSION (NEW ICE RINK WITH SUPPORTING FACILITIES, EXCLUDING FIELD HOUSE)

MAIN FLOOR (EXPANSION/RENOVATION) AREA: 1,504 M²
 BASEMENT (EXPANSION/RENOVATION) AREA: 3,951 M²
 TOTAL (EXPANSION/RENOVATION) AREA: 5,455 M²



Scenario #3 – New Construction (Site Plan)



Facility Needs Assessment (Program Plan)

	Scenario #2	Scenario #3
Total Investment	\$58,585,655.02	\$85,885,695.65
Description	Expansion	New Construction
Pros	<ul style="list-style-type: none"> • Higher cost per square footage • Two Standard Size Arenas • Improved Viewing Area for Auxiliary Arena • New program spaces: training rooms, first aid room, multipurpose rooms, one extra leasable space • Expanded concession 	<ul style="list-style-type: none"> • Lower construction cost per square footage • New facility that could meet most needs addressed in Recreational Master Plan • Two Standard Size Arenas • More efficient floor plan • Option to repurpose existing facility as a field house • Keep existing facility open until new one opens
Cons	<ul style="list-style-type: none"> • Higher site development costs due to unknown existing conditions • Reduced spatial efficiencies • Reduced ice time during construction • No changes to existing main arena and associated spectator areas • No changes in overall main arena spectator capacity 	<ul style="list-style-type: none"> • Longer timeline for an operational facility • Continued reinvestment required to upkeep existing facility

Recommendations and Conclusions

- ▶ In both expansion and new construction, an expanded site is required, we recommend use of the adjacent ORE grounds as an option. The town can explore other site locations as they see fit, but this was excluded from the scope of this study.
- ▶ We recommend construction of a new facility on a different site as better space efficiencies can be accomplished than in an expansion scenario.
- ▶ New construction is more cost effective than expansion.
- ▶ Existing facility is halfway through its useful life.
- ▶ The existing two-level configuration makes it challenging for accessibility, a new facility may be able to accommodate most services in one level.
- ▶ Expansion costs could increase due to unforeseen, unknown existing conditions.
- ▶ A new facility could also accommodate additional programming, some outlined in the Recreational Master Plan. The inclusion of additional programs was excluded from the scope of this study.
- ▶ New Facility can be shared with other municipalities within the county, potentially offsetting some of the construction costs.

Next Steps – Demographic Considerations

- **Mature Population**
 - Median Age: 43.6
 - Majority of Population between 15 to 64 Years.
 - Demand for recreational facilities is high.
- **Current Population:** 9,209 (2021)
- **Steady Growth Rate:**
 - Between 2016 – 2021: Increased by 0.3%
 - Average Annual Growth rate of 1.76%
 - Population expected to grow by 839 by 2027 (Source: www.olds.ca).
- Olds possesses a highly educated, skilled workforce, with 59% of residents holding post-secondary credentials including college certificates, diplomas, and university degrees.
- Olds has a strong education system, with high-quality primary and post-secondary schools.
- In general, there is a high demand for recreational facilities.
- The Olds Sportsplex is home of the **Olds Grizzlys** and **Olds College Broncos**.



Source: www.olds.ca



Source: www.olds.ca

Next Steps – Planning Considerations

- ▶ Is the facility worth keeping?
 - ▶ FCI Score
 - ▶ Program Requirements
 - ▶ Age
- ▶ What is the best path forward?
 - ▶ Renovation/Expansion
 - ▶ Replacement
- ▶ Is the current site the best option?
 - ▶ Within Olds
 - ▶ New site out of Town
- ▶ How long should you wait?
 - ▶ How much life is left
 - ▶ Value of reinvestment



Questions?

