

## FACILITY EVALUATION REPORT

### Arena Complex

84 Whyte Avenue, Dryden, ON

#### Facility Details

Gross Area (Sq.m.):	5765		
Construction Year:	1979 (south arena) 1988 (north ice-pad)		
Replacement Cost:	\$ 26.9 million		
Previous Evaluation:	2010	By:	Stantec
Date of Evaluation:	09-Aug-22	Project #:	22091
Evaluator:	Inhouse		

#### Repair/Maintenance Events *\*See attached breakdown of action items by period.*

0-5 year Recommended Event Action Budget	\$ 842,600.00
6-10 year Recommended Event Action Budget	\$ 3,948,400.00
11-20 year Recommended Event Action Budget	\$ 2,833,000.00

#### General Summary:

The arena complex is a twin ice pack facility originally constructed in 1979 with the north ice pad added in 1988. The facility has generally been well-maintained with routine repairs and replacement. As listed in the breakout of specific items, there are some action events that will require attention.

**Structural Summary (Superstructure):**

There were no structural repair events noted in the staff observations. Due to the provincial regulations, the roof will require inspection by a licensed structural engineer on an annual basis.

**Envelope Summary (Shell):**

The envelope of the building is typical of many other pre-engineered structures. It has limited thermal and air/vapor seal, but performs adequately for its function as a twin pad arena of its age. The roof has been included in the schedule of repair replacement events, particularly those related to the flat roof areas, which are more susceptible to leakage and wear.

The events also account for window and door repair/replacement.

**Interior Summary:**

Most surfaces within the twin pad are durable, concrete or concrete block, where exposed to public assembly types of abuse such as in the arena, the circulation corridors, change rooms and public washrooms, etc. typical of its use. The listed events outline replacement of various flooring.

**Mechanical Summary:**

This report outlines several repair replacement events, typical for a building of its age and function. Early events propose replacement of various toilet and bathroom fixtures. Long range, there are rink refrigeration and HVAC replacement events.

**Electrical Summary:**

The facility has undergone routine, light fixture replacement, and should continue with schedules to update items in the general electrical distribution system, such as panels and main supply to the building within the event Horizon of this report.

### Study References and Methodology:

The study provides a snapshot of the physical condition and age of building components or systems of the facility at the time of the site visit conducted for evaluation. The site visit is a brief visual, non-invasion walk-through survey of the readily accessible aspects of the building and its site. The survey should not be considered technically exhaustive. The study team also reviews any technical drawings and or other reports and/or building records that are supplied to the evaluator by the facility owner/operator. A brief interview is conducted with maintenance personnel or building users, when possible, to further ascertain known issues for the facility assessment.

The study follows the Uniformat II method for categorizing building components and identifies a potential repair or replacement event. Such an event is provided with an approximate estimate of quantities and cost to maintain the building and not necessarily create an improvement of building feature or performance. The events are organized into potential risk of occurrence over three periods starting with the next five years, years 6 to 10 thereafter and for a period not exceeding a horizon of 20 years from the visit date. In each period, the variables affecting repair or replacement events diminish in accuracy of event cost the further this action is undertaken from the date of the report.

The methodology used in this study is based on the contract scope and the terminology/limitations of ASTM E2018-15 Standard Guide for Property Assessments. Event estimates provided herein are represented in 2022 Canadian dollars. Future periods referred to in this report should be indexed based on several factors affecting future costs, of which may include inflation indexing, regional changes in labour or material availability in the construction industry. The reader would apply these accordingly.

**Extra Study:** In context to a Uniformat II item, our report may on occasion make a recommendation for the City to engage an expert to conduct addition investigation and/or study concerning an existing building component. This is because a determination could not be reasonably ascertained by Quartek within the parameters of our study scope or because the study/investigation will afford the City more latitude as to the best remedial action other than simply a repair/replacement option. The study/investigation recommendation is in itself an event and we identify a potential cost amounts for budgeting this action. The studies we noted:

**Arena Roof Study:** As required by regulation for all arenas in Ontario, a peiodic roof structure study must be conducted by a structural engineer to assess condition of the structure and if required, to recommend further action to ensure that the roof is safe from failure in the event of a snow loading and or wind factor from severe weather.

We may determine that as a follow-up after implementing a recommended study/investigation, the result (findings) are likely to facilitate a cost for replacement, remediation or other action, a budgetary amount in the form of an allowance has been noted. The findings of the recommended study may exceed this allowance depending on the outcome, but some funding will presumably be allocated to cover a portion of the action.

**Theoretical Life:** (References provided from RE Capp and Other M/E reference documents) We have provided selective examples of typical operational/functional life for various building components as a general guide to readers:

#### Electrical Components

Electrical Switch gear	40 years
Electrical Light Fixtures	20 - 30 years + *Efficiency Obsolescence
Radiant Electrical Heating	20 years + *Efficiency Obsolescence
Main Conductors	60 – 70 years
Transformers	30 - 40 years + *Efficiency Obsolescence

#### Mechanical Components

Plumbing Piping (Copper)	50-60 years
Hydronic Piping (galv.Iron)	70 - 90 years + *Efficiency Obsolescence
Washroom Fixtures	30 years + *Efficiency Obsolescence
San.Waste Piping (Iron)	60 – 70 years
Gas Furnaces(combustion)	20 - 30 years + *Efficiency Obsolescence
Air handling with H/C coils	50 years + *Efficiency Obsolescence

Light Metal Ducting	60 – 70 years
<u>Enclosure Components</u>	
Window Units (Alum.Frame)	40-50 years + *Efficiency Obsolescence
Flat Roofing Membranes	30 - 40 years + *Efficiency Obsolescence
Sloped Roofs (Shingles)	20-40 years
San. Waste piping (Iron)	30–70 years
Standard Brick (Veneer)	80 - 100 years
Conventional EIFS wall	40 - 60 years
Exterior Metal Siding	40 - 60 years
<u>Superstructure Components</u>	
Concrete Foundations	40-50 years + *Efficiency Obsolescence
Structural Steel Framing	30 - 40 years + *Efficiency Obsolescence
Masonry Walls	20-40 years
San. Waste piping (Iron)	30–70 years

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**General Report Disclaimer:**  
The report should be reviewed in context to any prior hazardous building materials assessment studies as to further budgeting considerations beyond the limited repair/replacement events described in this report. The intended use of the report is for assistance with long-range asset management planning for a facility under its current state so ideally adequate budgeting can be provided.

The repair replacement events identified in the report are not intended to capture routine maintenance of various components of the facility that would be generally anticipated as part of the day-to-day operations. Deferred maintenance can lead to earlier than predicted failure of equipment, systems, materials, etc. Notwithstanding the described methodology, the study findings are only as accurate as the available information provided, the allowable time to conduct a site visit to properly document findings and the level of access afforded the surveyors by the owner's representative. Costing accuracy may vary due to our ability to fully assess that collateral affects of a repair/replacement event on other elements of the building or surrounding site.

**Part A Substructure**

No Events

**Part B Shell****B10 Superstructure**

B1020

**Roof Construction**

B102001 Structural Frame

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
Allowance	Study	1	\$ 5,000	Annual Roof framing Inspection by a Structural Engineer	<b>Study Rq'd.</b>

**Condition** Arena 1 Front single storey - Open web steel joists Good condition, Routine safety  
Precaution; Repeat each year per regulations

**Scope** The structural frame could consist of structural steel including columns, beams, joists, and all associated items. It could be a concrete frame utilizing concrete or masonry columns and concrete girders and beams. The structural frame could be wood columns with wood beams or wood trusses. The structural frame could be a combination of the above. For example, concrete or masonry columns with structural steel beams and joists. All associated work items should be included in each assembly. Separate assemblies would be used for different types of construction. The unit of measure at the assembly level is the square footage of the supported area. Decks and slabs are not included in this assembly

**B20 Exterior Enclosure**

B2030

**Exterior Doors**

B203001 Solid Doors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		13	\$ 20,000	Personnel doors, concession door mechanical room.	<b>Replace</b>

**Condition** Panic devices, hinges, closures. Replaced as required. Some are older and due for replacement

**Scope** Assemblies include all exterior solid doors, hollow metal or wood with frames. Solid doors may include viewing lites in door. Door hardware is included.

**Part C Interiors**

C1030

**Fittings**

## C103002 Toilet and Bath Accessories

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Various	
SM		17	\$ 2,000		<b>Replace</b>

**Condition** Hand towel, soap and paper towel dispensers

**Scope** Toilet and bath accessories. For example, soap dispensers, toilet paper holder, towel dispensers, grab bars, bathroom mirrors, etc.

## C103003 Marker Boards and Tack Boards

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Offices, Special event room, Shop and common areas.	
SM		14	\$ 4,500		<b>Replace</b>

**Condition** 4 marker boards in good condition. Approximately 10 cork boards, good to fair condition

**Scope** Assemblies include all marker boards, tackboards, and fastening devices. The unit of measure at the assembly level is each.

## C103007 Fire Extinguisher Cabinets

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena one, area two lobbies	
LM		11	\$ 3,000		<b>Replace</b>

**Condition** Fair, some showing signs of rust. Consider plastic when replacing

**Scope** This assembly would include all types and sizes of fire extinguisher cabinets. Fire extinguishers are not included in this assembly.

## C103008 Counters

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Front Desk & Cafeteria	
SM		2	\$ 3,000		Replace

**Condition** Catering counter, poor. Scheduled for replacement. Office, good

**Scope** Assemblies include all types of lockers, either wood or metal, single or double tier. Special bases used for lockers would be included in this assembly.

**C30 Interior Finishes**C3020 **Floor Finishes**

## C302005 Carpeting

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena/Admin Offices	
SM		750	\$ 6,500		Replace

**Condition** Fair, but dated and rather worn. Price is supply and installed with foam underlay

**Scope** Sheet or tile carpet with appropriate underlay

## C302007 Painting and Staining Floors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Seating sections, area behind rink 1, shop, mechanical rooms	
SF		1500	\$ 5,000		Coating

**Condition** Good, painted regularly, touched up, in house.

**Scope** Assemblies include painted and stained floor surfaces.

## C302007 Painting and Staining Floors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Rink 2 around boards and beside rubber flooring.	
SM		750	\$ 2,500		Coating

**Condition** Good, but gets marked up and scratched. Repainted regularly. Rubber flooring is being considered for rink 2. (more expensive though, although durable.

**Scope** Assemblies include painted and stained floor surfaces.

## C302009 Floor Toppings and Traffic Membranes

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SF		1	\$ 1,000	protective system runner for leaving/entering ice surface for Jr A Team.	Replace

Condition Deteriorating Quickly

Scope Sheet or tile carpet with appropriate underlay

## C3030

## Ceiling Finishes

## C303001 Exposed Concrete Finishes

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SF		2200	\$ 7,000	Dressing Rooms, and Dressing Room hallway	Coating

Condition Fair, could use paint

Scope Assemblies include concrete finishes applied to interior ceilings. This assembly does not include items that directly apply to ceiling finishes covered elsewhere in this subsystem.

**Part D Services****D10 Conveying**

## D1090

## Other Conveying Systems

## D201005 Other Material Handling Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 7,500	Elevating Work Platform	Replace

Condition Good, inspected regularly

Scope Material or handling systems not described by the assembly categories

**D20 Plumbing**

## D2010

## Plumbing Fixtures

## D201001 Water Closets

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		3	\$ 10,000	Zamboni room, Mechanical Room	Replace

Condition Original

Scope Number of fixtures All terminal devices on the domestic plumbing system which have water supplied to the fixture. Hot water heaters, hose bibbs, and special equipment are not counted as a fixture.

D201002	Urinals					
	Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
	EA		13	\$ 2,900	Men's washrooms, Dressing rooms, Referee room,	Replace
	Condition	Most original. 3 newer.				
	Scope	Self explained				
D201003	Lavatories					
	Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
	EA		3	\$ 7,500	Arena Mechanical room, Arena Caretaker closet	Replace
	Condition	Most in walls.				
	Scope	Number of fixtures All terminal devices on the domestic plumbing system which have water supplied to the fixture. Hot water heaters, hose bibbs, and special equipment are not counted as a fixture.				
D201004	Sinks					
	Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
	EA		16	\$ 4,800	Washrooms, dressing rooms, Staff kitchens, cafeteria	Replace
	Condition	Fair, some have been replaced and we continue to do so are required.				
	Scope	Number of fixtures All terminal devices on the domestic plumbing system which have water supplied to the fixture. Hot water heaters, hose bibbs, and special equipment are not counted as a fixture.				
D201005	Showers / Tubs					
	Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
	EA		8	\$ 40,000	Ref room. Dressing rooms. Staff rooms.	Replace
	Condition	Original tile, original plumbing, original fixtures. Price is to update 4 washrooms to tile with new fixtures.				
	Scope	Self explained				

**D30 HVAC**

D3020

**Heat Generating Systems**

D302002 Hot Water Boilers

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena Mechanical Room And Arena Zamboni room	
KW	EA	2	\$ 30,000		<b>Replace</b>

**Condition** Identical Units are high volume boilers. Serviced annually, but due for replacement.

**Scope** Assemblies include boilers, expansion tanks, chemical feeders, air separators, pumps, heat exchangers, boiler feed units, etc. This assembly would also include fittings and specialties and the flue stack. The unit of measure at the assembly level is each system..

D302003 Furnaces

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena Offices, dressing rooms, Rink 2 washrooms	
KW	EA	2	\$ 13,000		<b>Replace</b>

**Condition** Arena lobby Furnace in good condition. Dressing room furnace dated. As is the Furnace for the Washrooms

**Scope** This is a system that heats air. Assemblies would include furnace and necessary fittings and specialties required for hookup, including flue and stack. The unit of measure at the assembly level is each.

**D50 Electrical**

D5030

**Communications and Security**

D503001 Fire Alarm Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Through the facility	
EA		1	\$ 100,000		<b>Replace</b>

**Condition** Good, inspected regularly. No means to determine total costing. Rough estimate of cost to install new today.

**Scope** Assemblies include wire, conduit, conduit support or fastening systems, fire alarm devices, fire detection devices, safety switches, all electrical connections, and other associated items

## D503002 Telecommunications Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Through the facility	
EA		1	\$ 20,000		Replace

**Condition** Good, managed and maintained by City of Dryden IT Shaw, Bell and Tbay Tel. Not exactly organized, but updated and added onto.

**Scope** This system would include central switchboards, telephone sets, underground ducts, and manholes. Assemblies include wire, conduit, backboards, cabinets, outlets, and power supply connections.

## D503004 Public Address Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena 1 and arena 2 have separate systems.	
EA		2	\$ 50,000		Replace

**Condition** Cost is to replace all components

**Scope** Assemblies include wire, conduit, speakers, monitoring devices, amplifiers, switches, power system tie-in devices, and detection devices.

## D503006 Clock and Program Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena Score clocks, Rink 1 and rink 2	
EA		2	\$ 100,000		Replace

**Condition** Cost is to replace all components

**Scope** Assemblies include wire, conduit, power systems tie-in, safety switches, control panels, battery back-up devices, clocks and outlets.

D5090

**Other Electrical Services**

## D509005 Electrical Heating

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				coil heaters with blower. Girls dressing room, Arena maintenance shop	
SM		1	\$ 1,500		<b>Replace; To be redundant</b>

**Condition** Fair. To be replaced with more efficient solution.

**Scope** Items could include baseboard heaters and wall and ceiling heaters. Assemblies include safety switches, control devices, heaters, conduit, and wire.

**Part E Equipmt. & Furnishings****E20 Furnishings**

E2010

**Fixed Furnishings**

## E201003 Seating (Fixed)

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena 1 seats Arena two bleacher systems	
EA		950	\$ 350,000		<b>Replace</b>

**Condition** Arena Seats Reached end of Life; Bleachers dated, not optimal, but function. Painted regularly. Steel framed, wood bench/

**Scope** The types of furnishings found here include artwork, window treatments, and seating.

## E201004 Fixed Floor Grilles and Mats

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Foyer	
EA		2	\$ 3,000		<b>Replace</b>

**Condition** Poor, requires replacement/relocation

**Scope** The types of furnishings found here include artwork, window treatments, and seating.

E2020

**Moveable Furnishings**

E202003 Freestanding Furniture

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Picnic tables	
EA		5	\$ 2,000		Replace

**Condition** Poor, to be replaced with rolling, folding tables

**Scope** Institutional equipment includes items that are normally found in hospitals, laboratories, auditoriums, and libraries.

E202004 Rugs and Accessories

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Portable	
EA		2	\$ 2,000		Replace

**Condition** Red carpets for ice. One 45feet long, one 30 feet long.

**Scope** Assemblies include rugs and accessories.

**Part F Special Construction**

No Events

**Part G Bldg. SiteWorks****G20 Site Improvements**G2020 **Parking Lots**

G202004 Marking &amp; Signage

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Accessible parking spaces	
EA		3	\$ 900		Coating

**Condition** Price for all 3 lots. Interdepartmental charge. Repainted and new signs as required.

**Scope** This includes painting of the parking stalls, signage, etc.

G2030

**Pedestrian Paving**

## D203001 Bases and Sub-Bases

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		2500	\$ 35,000	Sidewalk in front of building	<b>Replace</b>

**Condition** In general good, 65% to be replaced in 2023 as a result of the expansion project

**Scope** These are the compacted and prepared gravel or soil layers that are placed prior to the installation of the final surface. The subbase is placed and compacted before the base layer is applied.

## D203099 Other Walks, Steps and Terraces

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
		3	\$ 3,000	Behind Arena 1	<b>Replace</b>

**Condition** Concrete platforms when exiting building.

**Scope** Walks, steps, ramps, terraces not described by the assembly categories listed above.

**Part A Substructure**

No Events

**Part B Shell****B20 Exterior Enclosure**

B2010

**Exterior Walls**

B201011 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				various	
SM			\$ 5,000		<b>Repair</b>

**Condition** Various area of Rink 2, Can be resealed. Will be formally evaluated during block laying and brick fascia installation in 2023

**Scope** Exterior application of joint sealants

B2030

**Exterior Doors**

B203001 Solid Doors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		13	\$ 26,000	Emergency exits for Rink 1, mechanical rooms, concession exit.	<b>Replace</b>

**Condition** Some are double doors. Some single.

**Scope** Assemblies include all exterior solid doors, hollow metal or wood with frames. Solid doors may include viewing lites in door. Door hardware is included.

B203002 Glazed Doors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 3,500	Arena Office from Sidewalk	<b>Replace</b>

**Condition** Door to office in good condition, older but low usage.

**Scope** Assemblies include all glazed exterior doors with glass, frames (not included in storefront and curtain walls). These doors can be made of storefront materials, but are not part of a storefront. Door hardware included.

B203004 Overhead Doors and Roll-up Doors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		2	\$ 20,000	2 exterior roll ups	<b>Replace</b>

**Condition** Original Door, showing signs of age.

**Scope** Overhead and roll-up doors installed in exterior walls or exterior skin. Assemblies include frames, hardware, hoisting devices, and finish and other associated work. The unit of measure at the assembly level is each door.

**B30 Roofing**

B3010

**Roof Coverings**

## B301001 High Slope Roof Coverings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Over Arena 1 and 2	
SM		70000	\$ 1,500,000		Replace

**Condition** EPDM. In general, fair condition but requires patching annually, particularly in the valley between Rink 1 and Rink 2

**Scope** Assemblies include roof coverings, such as shingle, wood shake, and standing seam, etc.

**Part C Interiors****C10 Interior Construction**

C1020

**Interior Doors**

## C102002 Glazed Interior Doors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Office, (1) Rink 2, (4)	
EA LEAF		5	\$ 5,000		Replace

**Condition** Fair condition

**Scope** Assemblies include all glazed interior doors with glass, frames, finish, etc. Interior door hardware is included

## C102004 Sliding and Folding Doors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				power operated	
EA		3	\$ 70,000		Replace

**Condition** Foyer to lobby. Large, 30k Lobby to arena 1, 2 doors, 20 each.

**Scope** Assemblies include all sliding and folding doors with frames, hardware, locking devices, tracks, and supporting systems. The unit of measure at the assembly level is each.

## C102005 Interior Overhead Doors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Onto the ice surface of rink 1. 2, Zamboni shop from rink 1 and 2	
EA		3	\$ 30,000		Replace

**Condition** Good. Overhead door to ice surface much heavier, larger, most costly

**Scope** Overhead doors installed in the interior of a facility. Assemblies include frames, hardware, hoisting devices, and finish and other associated work. The unit of measure at the assembly level is each door.

## C102007 Interior Door Hardware

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Various	
EA		50	\$ 10,000		Replace

**Condition** Replaced or repaired regularly or as required. Includes closures, handles hinges, push plates for up to 50 doors.

**Scope** Interior door hardware includes items such as closers, hinges, locksets, panic hardware, etc. The unit of measure at the assembly level is each door.

## C1030

**Fittings**

## C103001 Compartments, Cubicles and Toilet Partitions

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Dressing room washrooms	
EA		22	\$ 25,000		Replace

**Condition** 11 in new or very good condition. 11 older, or original partitions

**Scope** Assemblies include individual compartments, cubicles, toilet partitions, and urinal screens.

## C103004 Identifying Devices

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				various	
SM		23	\$ 2,000		Replace

**Condition** Many replaced, or in very good condition.

**Scope** Assemblies include all signs, plaques, traffic markers, etc.

## C103006 Lockers

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Mostly in rink 2. Some in staff area.	
SM		100	\$ 50,000		Replace

**Condition** Good condition, not city owned but possibly left for City. If they are removed, they would not be replaced.

**Scope** Assemblies include all types of lockers, either wood or metal, single or double tier. Special bases used for lockers would be included in this assembly.

C103006	Shelving					
	Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
					Various. Office, maintenance areas.	
	LM		20	\$ 8,000		<b>Replace</b>
	Condition	Wood Shelving in Office. Good condition. Steel shelving in other locations, good condition				
	Scope	Assemblies include all types of shelving with brackets and all supporting materials and finish, if required.				

**C30 Interior Finishes**

C3010	Wall Finishes						
C103099	Other Wall Finishes						
	Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag	
					Ends of Arena 1 and 2		
	SM		2000	\$ 400		Coating	
	Condition	Various area of Rink 2, Can be resealed					
	Scope	Assemblies include finishes to wall types not included above. These include, but are not limited to, different types of shielding and the work and materials associated with each.					
C3020	Floor Finishes						
C302008	Wall Base Finishes						
	Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag	
					Office, meeting rooms		
	SM		75	\$ 1,000		Coating	
	Condition	Good					
	Scope	Assemblies include wall base, consisting of various materials such as vinyl, ceramic tile, etc.					
C3030	Ceiling Finishes						
C303007	Suspension Systems						
	Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag	
					Entire area of lobby, office, foyer, washrooms, cafeteria and meeting rooms		
	SM		None	\$ 75,000		Replace	
	Condition	Good condition. Does get abused. Includes framing/rails and tiles					
	Scope	This assembly includes any suspension system which is suspended or hung from the structure for the purpose of fastening a ceiling.					

## C303099 Other Ceiling and Ceiling Finishes

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SF		44000	\$ 70,000	Low E Ceilings, Over arena ice surfaces	Replace
Condition	Good condition, some rips and tears. Repaired as required				
Scope	Special ceilings and ceiling finishes not described by the assembly categories listed above.				

**Part D Services****D10 Conveying**

## D2090 Other Conveying Systems

## D209099 Other Material Handling Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		1	\$ 2,500	Pallet Jack	Replace
Condition	Good				
Scope	Material or handling systems not described by the assembly categories				

**D20 Plumbing**

## D2040 Rain Water Drainage

## D204001 Pipes and Fittings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		3	\$ -	Valley between 1 and 2 (see Condition Notes)	Replace
Condition	Specifically drain pipes from roof to sewer system. Fair condition. Would be included in price/job to replace entire membrane over rinks 1 and 2 See:B3010				
Scope	Assemblies include pipe and fittings from the roof drains to the discharge points, including supports and other associated work				

## D204002 Roof Drains

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		4	\$ 15,000	Valley between 1 and 2	Replace
Condition	Fair				
Scope	Assemblies include roof drains. The unit of measure at the assembly level is number of drains.				

**D50 Electrical****D5010 Electrical Service and Distribution****D501002 Secondary**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Outside, behind arena 1 and 2	
KVA		1	\$ 30,000		<b>Replace</b>

**Condition** Appears good. not sure if owned by the utility provider or the City of Dryden

**Scope** Transformers fed from protection equipment on the building side of primary transformer. Assemblies include transformers, conduit, conduit support, and wire.

**D501003 Main Switchboards**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena Electrical Room	
KVA		2	\$ 50,000		<b>Replace</b>

**Condition** Fair Original for rink 1 and 2

**Scope** This includes the protection equipment and metering devices for main distribution. Assemblies include main distribution panel, breaker, fuses, and meters.

**D501004 Interior Distribution Transformers**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Original	
KVA		1	\$ 30,000		<b>Replace</b>

**Condition** Fair, Original

**Scope** This includes the interior step-down or back boost transformers

## D501005 Panels

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KVA		7	\$ 100,000	Electrical room, Mechanical room, skate sharpening room. Office	Replace

**Condition** Good, less than 10 years old. 10K-20K per panel installed based on sizing 100K

**Scope** Branch circuit panel boards. Assemblies include panel boards, breakers ,conduit, and wire.

## D5030

**Communications and Security**

## D503008 Security Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KVA		1	\$ 15,000	Through out facility . See Extra options in Condition	Replace

**Condition** regularly maintained and inspected components replaced as required. Does not include camera heads. Add \$200 per camera head x 21 cameras

**Scope** Assemblies include wire, conduit, conduit support or fastening systems, security alarm devices, all electrical connections, and other associated items. Intrusion Detection Systems (IDS) are included in this category.

## D5090

**Other Electrical Services**

## D509002 Emergency Lighting and Power

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KVA		18 Exits 18 emergency lights. 3 Battery packs	\$ 15,000	Through out facility.	Replace

**Condition** Many retrofitted to LED. @ of 3 battery packs replaced. Heads replaced as required. Much of system in very good condition

**Scope** Assemblies include fixtures, motors used for power generation, connection and testing, transfer switches, conduit, wire, battery chargers, batteries, and solar panels.

**Part E Equipmt. & Furnishings****E10 Equipment****E1020 Institutional Equipment****E102001 Auditorium and Stage Equipment**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Staging	
EA		2	\$ 40,000		Replace

**Condition** One set good, one set fair. Combined for 1100 q ft of staging.

**Scope** Institutional equipment includes items that are normally found in hospitals, laboratories, auditoriums, and libraries.

**Part F Special Construction****F10 Special Construction****F1040 Special Facilities****F104005 Ice Rinks**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena 1 & Arena 2	
EA		2	\$ 1,500,000		Replace

**Condition** Board System original. 1978. Deferral is referencing boards. Components covered in other areas. New concrete floor with brine lines have estimates for up to \$750000 installed. X 2

**Scope** Special controls and instrumentation includes recording instrumentation and building automation systems.

**Part G Bldg. SiteWorks****G20 Site Improvements**

G202006 Resurfacing

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena Parking lot, Side and back	
SF		15000	\$ 195,000		<b>Repair</b>

**Condition** Showing signs of deterioration note sure the difference between G202002 and G22006

**Scope** This includes painting of the parking stalls, signage, etc.

G2040

**Site Development**

G202003 Fencing and Gates

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Around condenser	
LM		15	\$ 5,000		<b>Replace</b>

**Condition** Fair, showing signs of age. Estimate received to replace this fencing. 23 x15 foot enclosure.

**Scope** This includes installation or construction of security, boundary, or barbed wire fencing and all required gates.

**G40 Site Electrical Utilities Preparations****G4010 Electrical Distribution**

G2401001 Transformers

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Behind Rink one	
LM		1	\$ 15,000		<b>Replace</b>

**Condition** Good , Not sure if owned by City or the Utility provider. Assumption for estimate based on Utility providing transformer and City providing Vault

**Scope** Electrical power transformers used in conjunction with electrical substations. May include pole/tower or pad-mounted transformers.

## G2401007 Duct banks, Manholes, Handholes and Raceways

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Side and rear of building Based on estimate of distance	
LM		2	\$ 30,000		Replace

Condition Good condition

Scope Components used in conjunction with electrical substations.

G4020 **Site Lighting**

## G2402006 Exterior Lighting Fixtures and Controls

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Perimeter of building and on hydro poles	
LM		10	\$ 5,000		Replace

Condition New in 2021 or 2022

Scope Includes fixtures, controls, and all components used in conjunction with

**Part A Substructure**

No Events

**Part B Shell****B20 Exterior Enclosure**

B2020

**Exterior Windows**

B202001 Windows

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena offices	
SM		2	\$ 4,000		Replace

**Condition** Windows in good condition.

**Scope** Fixed or operable windows located in exterior walls or exterior skin. Assemblies would include frames, glazing, caulking, finishes, and other associated work.

**B30 Roofing**

B3010

**Roof Coverings**

B301002 Low Slope Membrane Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Over arena lobby and offices	
SF		4000	\$ 200,000		Coating

**Condition** EPDM membrane in good condition. Replaced in 2018. Event pricing established from 2018 installation.

**Scope** Assemblies include roof coverings, such as built-up, elastomeric, modified bitumen, etc. Also, walkways or work areas (used to gain access to rooftop equipment) will be included here.

**Part C Interiors****C10 Interior Construction**

C1010

**Partitions**

C101004 Interior Guardrails and Screens

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena one, stairs, seating sections, ledges.	
SM		100	\$ 25,000		Replace

**Condition** Good

**Scope** Assemblies include balustrades (handrails and the row screen of posts that support them) and screens and associated work including tracks and anchoring systems. These balustrades/ guardrails are related to interior balconies and are not associated with stairs.

## C101007 Interior Glazing

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena 1 and Arena 2	
SM		128 pieces & 114 pieces	\$ 350,000		Replace

**Condition** Good in rink 1; Fair in Rink 2 Arena 1 and 2 shielding. Arena 1, all 5/8th thickness, 6 foot tall. Arena 2, mostly 5/8 thickness, feet tall

**Scope** Fixed or operable windows. Assemblies would include frames, glazing, caulking and other associated work.

## C101007 Interior Glazing

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena lobby	
SM		9	\$ 135,000		Replace

**Condition**

**Scope** Fixed or operable windows. Assemblies would include frames, glazing, caulking and other associated work.

**C30 Interior Finishes**C3010 **Wall Finishes**

## C301003 Gypsum Wallboard Finishes

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena Offices special even room and ice dog office	
SF		2500	\$ 30,000		Replace

**Condition** Good, repaired as required.

**Scope** This assembly includes gypsum wallboard applied directly to an interior wall surface. Furring strips or channels are included in this assembly. This assembly also includes taping, sanding, finishing, and sheetrock accessories. This assembly does not include items that directly apply to wall finishes covered elsewhere in this subsystem.

## C301004 Tile and Terrazzo Wall Finishes

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Dressing Room 10 Shower	
SM		1	\$ 5,000		Replace

**Condition** Excellent, installed in 2021. Cost is based on actual installation.

**Scope** This assembly includes tile and terrazzo applied directly to an interior wall surface. Each type of tile would be a separate assembly.

C3020

**Floor Finishes**

## C302004 Resilient Floor Finishes

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SF		120000	\$ 200,000	Arena 1, Dressing rooms, Lobby, walking tracks, hallways rented completed. Rink 2 common areas, poor.	<b>Replace</b>

**Condition** Excellent, installed in 2020 & 2021. Cost is based on actual installation.

**Scope** This assembly includes tile and terrazzo applied directly to an interior wall surface. Each type of tile would be a separate assembly.

C3030

**Ceiling Finishes**

## C303006 Painting and Staining Ceilings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		300	\$ 8,000	Shop, Zamboni Room, Compressor Room. Room 10	<b>Coating</b>

**Condition** Poor, hasn't been painted in years. Strictly cosmetic I a personal areas only. Cost is based on estimate to spray unfinished or unpainted ceilings for the areas listed.

**Scope** Assemblies include painted and stained finished interior ceiling surfaces.

**Part D Services****D30 HVAC**

D3090

**Other HVAC Systems and Equipment**

## D309002 Refrigeration System

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KW	Assembly	1	\$ 950,000	Refrigeration plant and into rink 1 and 2 : Price if replaced at one time.	<b>Replace</b>

**Condition** includes 3 reciprocating compressors. 3 brine pumps., 2 heat exchanger. Numerous valves, and safeties. Condenser. Brine supply to rink 1 and 2. 2 of 3 brine pumps replaced. All 3 compressors being replaced in 2023. Much piping and controls replaced. Condenser replaced in 2019. Chiller has 7 years life left. Brine headers are PVC with 50 years life.

**Scope** Includes equipment for refrigeration in a cold storage facility. Both low and medium temperature equipment are included. Assemblies include: condensing and compressor units, evaporator blowers, refrigerant piping, and specialties, heat recovery systems (liquid or gas), heat recovery distribution systems (liquid or gas), and system testing and balancing.

## D309099 Other Special Mechanical Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				In arenas	
		2	\$ 130,000		Replace

**Condition** Large gas-fired unit (existing) Arena Dehumidification system. 2 smaller units being installed in rink 2 in 2023. Not recommended to replace gas fired unit at end of life. Add two more small electric units. These are approximately 65k installed.

**Scope** Any other mechanical system not defined in other categories. Assemblies would include special systems and special devices. The unit of measure at the assembly level is each system or device.

**D40 Fire Protection**D4010 **Sprinklers**

## D401002 Sprinkler Water Supply Equipment and Piping

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Throughout facility for Rink 1 and 2	
EA		1	\$ 200,000		Replace

**Condition** This was discussed in another arena. This is a guess to replace system.

**Scope** Assemblies include alarm valves, flow control valves, pipe and fittings from equipment to sprinkler heads, including all supports and wall or floor sleeves. All equipment including tanks, pumps, and other associated equipment, fittings, and specialties required for hook-up are in this assembly. The unit of measure at the assembly level is each sprinkler head.

D4030 **Fire Protection Specialties**

## D4030 Fire Extinguishing Devices

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Throughout Facility	
L/S		18	\$ 5,000		Replace

**Condition** inspected regularly. Price includes cabinets and fire extinguishers.

**Scope** Assemblies include all types of fire extinguishers, i.e., water, dry chemical, carbon dioxide, soda acid, etc. The brackets, sleeves, and supporting devices are included in this assembly.

**D50 Electrical****D5010 Electrical Service and Distribution****D501007 Motor Control Centres**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Refrigeration plant	

KVA		1	\$ 40,000		Replace
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Condition	Good, less than 10 years old
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Scope	This is a cabinet in which motor starters and operation devices are contained. Assemblies include the motor control center cabinet, motor starters, contacts, switches, conduit, wire, and all associated items.
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**D5020 Lighting and Branch Wiring****D502002 Lighting Equipment**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena 1 and 2	

KVA		112 high bay fixtures. Approximately 250 LED fixtures	\$ 90,000		Replace
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Condition	Arena one, 3 years old, Arena two, 8 years old. 90% or approximately 125 fixtures have been retrofitted to the LED within the last 3 years. Price includes replacement of all fixtures including installation.
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Scope	This assembly includes fixtures, conduit, wire, and switching devices.
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**Part E Equipmt. & Furnishings****E20 Furnishings****E2010 Fixed Furnishings****E102006 Other Fixed Interior Furnishings**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Penalty and players boxes.	

EA		8	\$ 12,000		Replace
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Condition	Good
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Scope	The types of furnishings found here include artwork, window treatments, and seating.
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E2020

**Moveable Furnishings**

E202005 Moveable Multiple Seating

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Storage	
EA		750	\$ 30,000		<b>Replace</b>

**Condition** Fair, replaced on ongoing basis.

**Scope** Assemblies include rugs and accessories.

**Part F Special Construction****F10 Special Construction**

F1040

**Special Facilities**

F104005 Ice Rinks

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena 1 and Arena 2	
EA		2	\$ 250,000		<b>Replace</b>

**Condition** Board system original, 1986, Deferral is referencing board

**Scope**

F1050

**Special Controls and Instrumentation**

F105002 Building Automation System

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Refrigeration plant	
EA		1	\$ 65,000		<b>Replace</b>

**Condition** Refrigeration System has plant controls./monitoring. Price based on estimate to replace refrigeration monitoring system.

**Scope** Special controls and instrumentation includes recording instrumentation and building automation systems.

**Part G Bldg. SiteWorks****G20 Site Improvements****G2020 Parking Lots****G202007 Miscellaneous Structures and Equipment**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Arena Parking lot, Side and back	
SF		12	\$ 9,000		Replace

**Condition** Referencing Jersey barriers. All new in 2018.

**Scope**

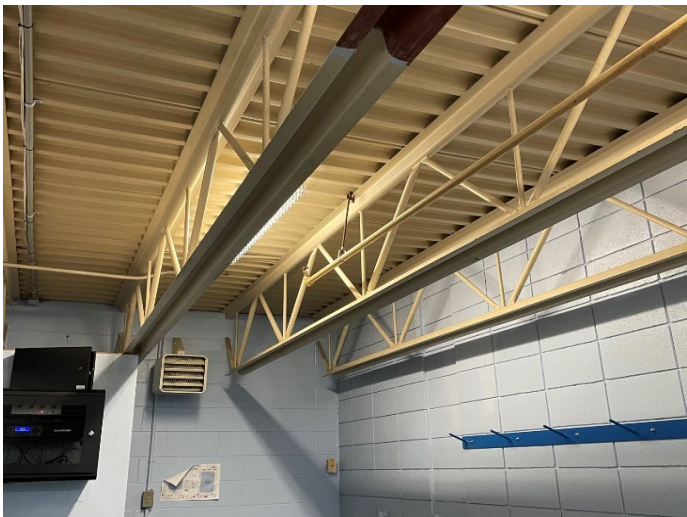
**G90 Other Site Construction****G9090 Other Site Construction****G909003 Snow Melting Systems**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Snow Zamboni Room	
EA		1	\$ 95,000		Replace

**Condition** Very Good , consist of coil, heat exchanger, piping, cushion tank, controls, pump and motor

**Scope**

Interior and Exterior Views



Interior and Exterior Views

