



City of
Peterborough

To: Members of the Finance Committee

**From: Sheldon Laidman
Commissioner of Community Services**

Meeting Date: January 13, 2020

**Subject: Report CSAD20-001
Future of Northcrest Arena**

Purpose

A report to provide information on the costs of refurbishment of Northcrest Arena as requested by Council at the October 15, 2019 General Committee meeting and as they relate to the 2020 Budget.

Recommendations

That Council approve the recommendations outlined in Report CSAD20-001, dated January 13, 2020, of the Commissioner of Community Services, as follows:

- a) That Northcrest Arena permanently close in April 2020 as a municipally operated arena and the net Arena budget be reduced by \$7,476 and General Contingency be increased by \$7,476; and
- b) That staff undertake a review of alternative uses for the building and/or site, complete a building condition assessment and a decommissioning plan for the facility and report back by September 2020.

Budget and Financial Implications

If recommendation a) is approved, the Northcrest Arena 2020 Operating Budget would be reduced by \$7,476 as a result of the closure in April 2020, represented by \$137,838 in reduced expenses and \$130,362 in reduced revenues. Part-Time staff within the Arena Division budget would be reduced by 2.84 Full-Time Equivalents (FTE) to

compensate for the seasonal Full-Time staff that will be reassigned to other Arena Division facilities once Northcrest Arena is closed.

The estimated cost for the decommissioning of the facility including the refrigeration plant is \$20,000 and could be accommodated in the 2020 Northcrest Arena Operating budget.

If recommendation a) is not approved and Council chooses to continue operation of Northcrest Arena, a 2020 Capital Project in the amount of \$1.465 million would need to be created for immediate Facility Priority Upgrades to Northcrest Arena.

The estimated cost of the 2020 Capital Budget request is detailed in Chart 1 and reflects the estimates obtained from Cimco Refrigeration for the refrigeration plant replacement and Carvajal Structural Engineers for structural repairs required for the facility to be maintained until April 2023.

Background

The 2020 Operating Budget for the Northcrest Arena assumed it would be operated for the full year and includes expenditures of \$478,227 and revenues of \$261,935 for a net tax levy requirement of \$216,292. This is a 32% increase from the 2019 net amount of \$163,440.

On October 15, 2019, Council approved a motion asking staff to provide the cost to refurbish Northcrest Arena.

Meanwhile, since the 2020 Operating Budget was developed, more information on the state of the building has been obtained which is also being presented in this report.

The draft 2020 Capital Budget does not include the necessary \$1.465 million allocation for equipment and structural repairs for the facility.

History of the Building

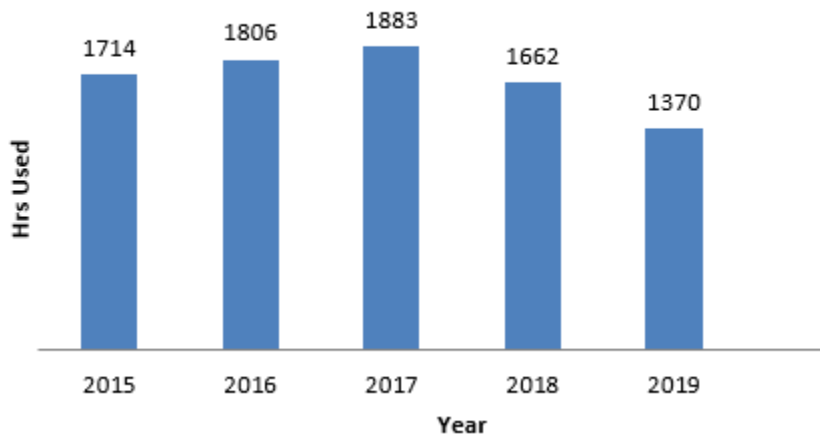
Northcrest arena was built in 1967 and has far exceeded its useful life at 52 years of age. Northcrest Arena operates seasonally only from September to May. The City has performed structural upgrades over its lifetime, but no significant facility renovations have occurred other than the replacement of the failed refrigerated slab with a sand floor solution in 2013. The floor replacement was meant to provide an additional 3-5 seasons of operation prior to the original plan of a new arena complex being constructed and operational in 2018. The plan to decommission Northcrest was intended to take place in 2018 but was deferred as a result of the delay with the new arena. Operating a facility well beyond the date for useful life has resulted in multiple issues occurring associated with operating a facility with aging infrastructure.

Facility Usage

Facility ice usage has declined at Northcrest Arena in recent years. See below **Table 1- Northcrest Ice Usage**, which shows a five-year historical trend. The increased demands in 2016 and 2017 were a result of men’s groups being reallocated to use Northcrest Arena’s available prime ice vs late-night non-prime ice in more desired facilities. The recent downward trend in ice usage in 2018 and 2019 is a result of minor hockey groups moving to neighbouring community arenas. Its limitations make the facility inadequate for tournament use, hockey games and pre/post season minor hockey tryouts due to inadequate dressing room sizes, inadequate parking lot capacity, viewing restrictions, and accessibility limitations. Some ice users have made it apparent that they will utilize ice outside the city (i.e. Norwood or other neighbouring communities) rather than use Northcrest Arena.

Currently, there is approximately 47 hours of permitted weekly ice usage at Northcrest including 8 hours for City Recreational Programs, 33.5 for Minor Hockey/Sport, and 5.5 of Adult programming. This includes approximately 45 hours of prime time use and 2 hours of non-prime use. There is a total of 65 hours of available prime time weekly out of the 105 hours total available for permitting. This represents prime time as 3pm-10pm weekdays and 7am-10pm on weekends. Available ice time is 7am-10pm daily during the operational period of September-April annually.

Table 1- Northcrest Ice Usage



Capital Work Required - Refrigeration Equipment

The refrigeration plant at Northcrest Arena contains multiple critical assets that have exceeded their life expectancy. Cimco Refrigeration, the City's refrigeration service provider, submits annual reports as part of their maintenance program, including recommendations for various maintenance and capital budget items. The following recommendations have been identified as issues for multiple years and are now required to be performed should Northcrest Arena remain open beyond April 2020:

- The flooded chiller, the plant's cooling vessel, which has a life cycle expectancy of 20-25 years, is 30 years old. Cimco and TSSA (Ontario's refrigeration plant governing agency) and industry standards suggest its replacement.
- The evaporative condenser is 16 years old and has shown signs of condition deterioration. The City's history for life cycle of these units is approximately 12 years and industry standards recommend replacement between 12-15 years. It is recommended this item be replaced.
- The compressor is 37 years old and is also well past the 25-30 year life expectancy and is recommended for replacement.

Based on the above, in order for Northcrest Arena to remain operational past April 2020 it would be required that a full replacement of the Refrigeration Plant be scheduled for the summer of 2020. This would include the above components, piping and electrical service panel but does not include the replacement of the refrigerated slab as the sand floor would remain as is. Approximate budget cost for this work is estimated at \$600,000.

Capital Work Required - Structural Concerns

In line with the City's standards for structural facility assessments, a structural review was completed in 2018 by Carvajal Structural Engineers (CSE). The visual review was performed to try and maintain the facility for another three-year period to April 2021. Four areas were identified for repairs and/or monitoring, with one structural beam requiring immediate repairs. Based on the estimates from CSE, a monitoring plan was put in place and capital funding was added in 2019 for the structural repairs. During the 2019 annual review, CSE further recommended a comprehensive review of the roof/ceiling structure which identified that the beams required a much larger scope of work than originally anticipated in the 2018 report and that repairs had to be made prior to the facility being occupied for the 2019/20 ice season. The repair work was completed for \$80,000.

CSE has recently performed a 2019 structural review of all existing conditions and update to the 2018 report. It recommends the following repairs if Northcrest is to remain operational beyond April 2020:

- Exterior Wall - High Area of Concern - Laterally Shifted Half Wall Area SW Corner
- Ice Rink Area - High Area of Concern - Drypacking Columns
- Wood Sections - Area of Concern - Localized Repairs to Dasherboards
- Ice Arena Exterior - Repair/Replace Sections of Pillaster
- Various Areas - Injection of Voids Under Slab
- Exterior - Foundation Walls Washout Repairs (Local Repair)
- Exterior Wall - CUM Block Wall Crack/Separation Front Side Entrance
- Exterior Wall - Repair/Replace Half Masonry Wall Sections
- Front Entrance - Repair/Replace Brick Masonry at Foundation Base
- Zamboni Room - Zamboni Slab Repairs and Resurfacing
- Exterior - Metal Cladding and Transite Panels Local Repairs
- Ice Rink Area - Cleaning and Painting of Structural Steel
- Ice Arena Deck - Slab-On-Grade Crack Repairs
- Exterior - Local Roofing Repairs and Drainage
- Facility - Annual Structural Visual Review

The total cost of these repairs and monitoring is estimated at \$455,000. Annual structural reviews will continue to identify areas of concern and recommendations for repairs required to maintain the facility as operational. The risk is very high that these annual structural reviews could identify additional costs beyond those estimates included in the revised 2019 report in order to keep Northcrest Arena operational through to the opening of a new arena complex.

Capital Work Required - Contingency for Emergency Repairs

Emergency repairs due to failing site services have been required in recent years. In 2017, approximately \$7,500 was spent due to two separate water and sanitary line repairs, while in January of 2019, \$20,500 was spent on repairs for a water main leak into the building from the City services. It was also determined in a review with Peterborough Utilities Commission (PUC) that the building water main is original from 1967, which was not fully replaced but repaired only at the area of the leak. Further breaks could happen at any time.

An Emergency Repairs contingency amount of \$200,000 would be required to accommodate these potential unplanned failures based solely on the age and current condition of the services.

Chart 1 lists these costs including appropriate contingencies.

Chart 1 – Northcrest Arena - Capital Work Required for 2020 Full Year Operation

Item	Description of Work	Amount
1.	Refrigeration Plant Replacement	\$600,000
2.	Structural Repairs- Various	\$455,000
3.	Contingency- Items 1 & 2	\$210,000
4.	Contingency- Emergency Repairs /Annual Reviews	\$200,000
	Total Budget	\$1,465,000

There is no guarantee how long the facility will be able to operate even with these improvements as additional structural work recommendations could come out of the update review in the spring once the ice is out and each season thereafter. Remaining open after April 2020 without performing the work identified in Chart 1 is not an option. The structural repair items identified by CSE are all in the priority rating of 1A Health & Life Safety and 2 Function Protection and are required to be performed in order to maintain continued use of the facility past April 2020. The refrigeration plant at Northcrest Arena contains multiple critical assets that have exceeded their life expectancy and have been identified as requiring replacement by Cimco Refrigeration, TS Engineering and TSSA to ensure that we are providing a safe workplace for every employee, a safe facility for users, and taking all reasonable precautions. Furthermore, ice user groups will need to be able to rely upon the ice being available and not making these capital upgrades will leave the facility extremely vulnerable to mid season emergency repairs resulting in significant facility closure time.

Further Risks

As identified within the City of Peterborough Asset Management Plan, Northcrest Arena has a Facility Condition Index (FCI) of poor condition. All major facility assets including site, structural, mechanical and electrical have exceeded all life cycle expectancies. In addition to these core items, the arena rink board system is in very poor condition and the refrigerated sand floor is currently in its seventh year of operation and was intended as a temporary solution to last three to five years leaving this as an unreliable alternative should the facility remain open. The overall poor facility condition index rating and the fact that all life cycle expectancies for the facility have been exceeded puts the City in a high-risk situation for additional issues to occur at a significant cost beyond the \$1.465M budget.

Longer-term Capital Work Required

The work identified in Chart 1 will only permit the building to be operated in the short-term. The work will not improve inadequate dressing room sizes, parking lot capacity, viewing restrictions, accessibility or other aging elements of the building such as the sand floor, roof, foundation and exterior walls. The anticipated costs for additional repairs required to refurbish Northcrest Arena for the longer term are detailed in Chart 2. These figures include budget estimates from previous Building Condition Assessments which include consulting fees and contingency as well as additional costs for demolition and decommissioning of portions of the existing structure to perform all work identified. All required construction identified in Chart 2 would be performed over several months and would result in the closure of the facility for at least one ice season.

Chart 2 – Northcrest Arena – Capital Costs – Longer-term

Item	Description of Work	Amount
1.	Structural- Exterior walls, structure, roofing Foundations	\$3,815,000
2.	Mechanical - HVAC, Dehumidification, Plumbing	\$150,000
3.	Electrical - Panels, Lighting, Alarm Systems	\$140,000
4.	Arena Floor/Boards Systems	\$1,100,000
5.	Site Services: Parking Lot, Sanitary and Storm Services	\$270,000
6.	Contingency - Items 1-5	\$ 820,000
7.	Demolition/Decommissioning - For items 1- 5	\$1,000,000
	Total	\$7,295,000

Recommendation

Staff recommend closure of Northcrest Arena in April 2020 and not revitalizing the existing structure. This recommendation is based on the identified Facility Condition Index rating and corresponding Building Condition Assessment, the 2019 Structural

Review by CSE and the annual report by Cimco Refrigeration and the extent of work required.

If this recommendation is approved, part-time staff within the Arena Division budget will be reduced and the seasonal four full-time staff will be reassigned to other Arena Division facilities once Northcrest Arena is closed. This existing complement is shared within the division currently, as Northcrest operates on reduced hours and is a seasonal operation.

While staff are not recommending the revitalization of this facility as a municipally operated arena, staff are aware of inquiries for other uses of the property. To undertake a review of alternative uses for the facility and site, a full Building Condition Assessment is required. Staff will assess all other opportunities for use of the facility and site and report back to Council in September 2020. As an example, this site has been identified as a possible site for a new Fire Station 2 in the north end. The review of possible sites and response times is still being evaluated. The report will also include a decommissioning plan and accompanying capital budget request.

Impact to Users

Due to the City's limitation of ice surfaces, the City has not been able to meet the demand for ice from user groups and minor hockey organizations since the completion of Evinrude Centre in 1996. As a result, all organizations have been limited in the number of members and teams their organizations can accommodate and the number of tournaments and events they can host. The elimination of the ice pad at Northcrest Arena will negatively impact all user groups as the City will be required to shift existing schedules at other facilities to ensure City programs continue and that ice is fairly allocated. Declaring the closure of the facility now allows ice user groups appropriate time to pursue other ice options for their organizations.

Arena users have been notified of the staff recommendation for closure and will be consulted to review opportunities that exist within other City facilities and those in the surrounding communities. City staff will engage with the neighbour communities to review any opportunities to accommodate for the reduction of available ice within the City. Staff will update the Arenas Parks and Recreation Advisory Committee the January user group meeting.

Summary

Due to the capital costs associated with continuing to maintain Northcrest Arena, staff recommend the closure of this arena in April 2020. Staff will assess all other opportunities for use of the facility and site location and come back to Council in September 2020 with a report that also includes a decommissioning plan and accompanying capital budget request.

Submitted by,

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