



TO: Mayor J. Lehman and Members of Council

FROM: J. Weston, M.A.Sc., P. Eng., PMP, Director of Engineering

NOTE: B. Parkin, P. Eng., General Manager of Infrastructure & Growth Management (Acting) 

C. Ladd, Chief Administrative Officer 

RE: Artificial Ice Rink Donation Update
(File: R04.AR)

DATE: August 11, 2014

On June 16, 2014, Council approved the following Motion for the acceptance of an artificial ice rink donation which reads as follows:

14-G-156 ACCEPTANCE OF AN ARTIFICIAL ICE RINK - DONATION – PILOT PROJECT

That the donation from Graham Fraser of Artificial Ice Infrastructure Coils and Chillers of an artificial ice rink with a value of \$250,000 be accepted for an artificial ice rink pilot project in 2015.

That staff in the Engineering Department in consultation with other departments as required, prepare a report for General Committee's consideration addressing the following:

- a) An evaluation of either Heritage Park or another high profile City owned site as the potential location for the pilot site;
- b) That no capital expenditures be made for the artificial ice rink; and
- c) An operating model that would mitigate any operating budget impact associated with the provision of an artificial ice rink on both a pilot and permanent basis.

Staff have completed an evaluation of several sites as potential locations for an artificial ice rink pilot project in 2015, including Heritage Park, Memorial Square, Holly Recreation Centre, Centennial Park, John Edwin Coupe Park and Shear Park (refer to Appendix "A").

Unfortunately, the evaluation determined that it is not possible to implement the artificial ice rink pilot project with no capital expenditure. All potential locations require capital expenditure to provide the two necessary components to run an artificial ice rink, namely a 400 amp power source and a winterized water service (refer to Appendix "B" for equipment photographs).

The preferred site is Centennial Park because it has the following advantages (refer to Appendix "C" for a sketch of the proposed location in Centennial Park):

- a) Lowest capital cost of approximately \$40,000, for installation of an external electrical panel to connect to available power within the nearby washroom building (\$33,000) and installation of a winterized yard hydrant connected to an existing water service to the nearby washroom building (\$7,000)
- b) Indirect lighting is available from adjacent walkway lighting within the park
- c) Space is available on the turf for the creation of the rink
- d) This waterfront location is already monitored by the City during the winter due to the nearby washroom building
- e) On-street parking and on-site parking lots are available for public use

Staff have also estimated the operating costs for the artificial ice rink pilot project in Centennial Park to be approximately \$27,200 for a 14-week pilot season as follows:

- a) Rink set-up and break-down \$8,000
- b) Rink boards \$1,500
- c) Equipment fencing rental \$750
- d) Labour (staff maintenance/inspection) \$2,400
- e) Labour (staff training for rink set-up/break down) \$3,600
- f) Hydro \$10,000
- g) Water (commissioning fee and supply) \$950

In addition to the above Operational costs, annual off-season storage fees are estimated to be approximately \$7,650 per year for the provision of a secure, indoor storage facility to house the equipment during the non-winter months.

The City has not yet taken possession of all of the necessary equipment to construct the ice rink. Currently, the City has only received the ice rink tubing, cooling pipes and glycol fluids are being temporarily stored at the Operations Centre. To avoid damage to the Fraser property, access for the delivery of the three large compressor units and pump equipment cannot occur until late Fall or early Winter 2014. The timing of this delivery would have to be coordinated with the rink infrastructure installations at Centennial Park to avoid delays in the set-up of the rink before the winter season.

The next step is for staff to investigate opportunities for fundraising to offset both the capital and operating costs associated with the proposed pilot project and then report back to General Committee.

Should you wish to discuss this project with staff, please contact Ms. Jacqueline Weston at extension 4551 or Mr. Walter Fischer at extension 5101.

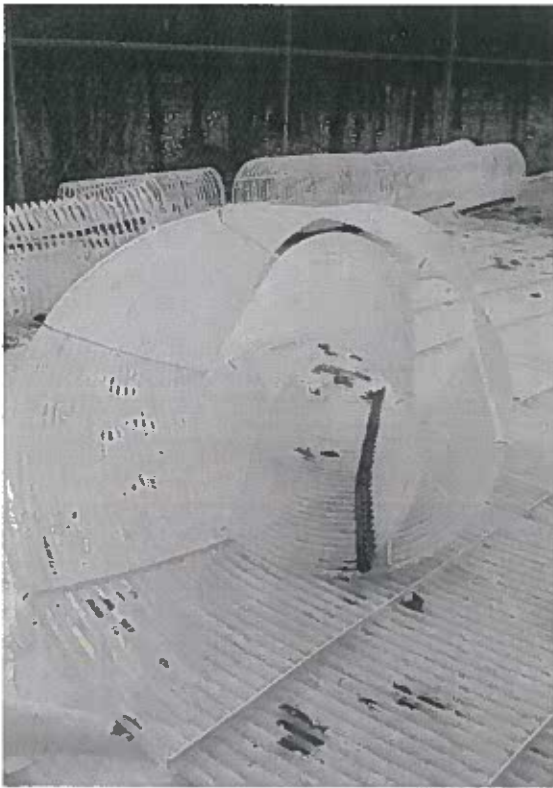


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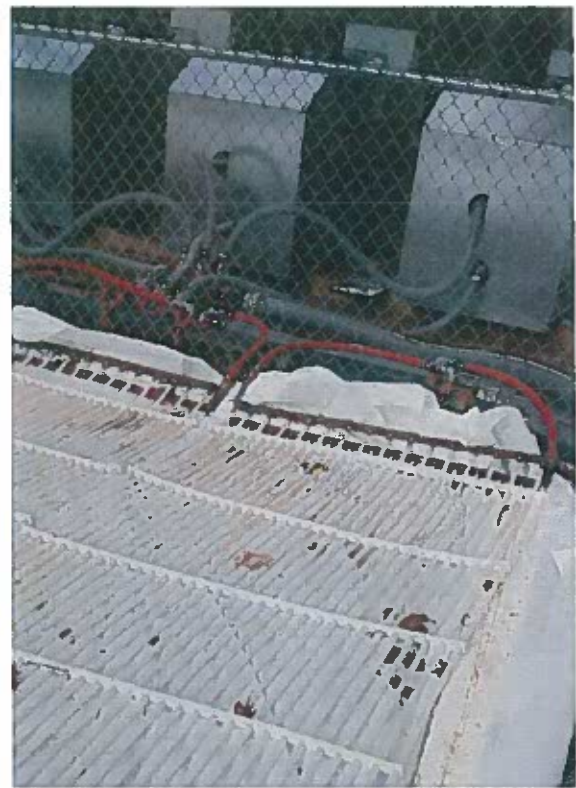
APPENDIX "A" – Artificial Outdoor Ice Rink –Location Chart

Potential Location for an Artificial Ice Rink	Potential Space	Available Services (Water)	Available Power Source (400 Amp Service required)	Available Space for Security Fencing	Available Parking	Available Park Lighting	Washroom/ Change Facilities	Site Specific Comments – PROs	Site Specific Comments – CONs	Capital Cost Projection
Heritage Park WARD 2	Flat grassed area south of Simcoe Street next to pond.	No Winter use • summer irrigation use only.	No • Immediate power supply does not exist and would have to be installed	Yes • Available space • Impacts public use of park during winter events.	Yes • municipal parking lot on Chase McEachern Way • Heritage Park • Fred Grant • Dunlop Street	No • In-direct lighting is possible from Simcoe Street and the adjacent walkway lights within the park. • Festival of Lights is located in park – ambient lighting may be available.	No Winter use Summer use only	• Site close to Downtown Core • Flat terrain for rink creation. • Combined use with BIA winter activities and events. • Security inspections and rink could be made secure and inspected daily by Facility and BIA staff. • Suggested for recreational skating only within park	• Park "full" with Winterfest Celebrations. • Park has irrigation system. Potential damage could result from rink installations as ice surface gets established. • Maybe too close to City Hall location. • Noise from compressors could impact downtown residents living nearby.	• High Cost • Dedicated transformer required.
Memorial Square WARD 2	Space too short for the length of the ice rink. Layout would conflict with pedestrian circulation from Heritage Park	No Winter use • summer irrigation use only.	Yes • Transformer available on-site • Power capacity may exist	No • space is available for security fencing for cooling pipes and compressors.	Yes • municipal parking lot on Chase McEachern Way • Heritage Park • Fred Grant • Dunlop Street	No • In-direct lighting is possible from Simcoe Street and from adjacent public parking lot (Flood light potential).	No	• Winterfest activities are not impacted. • Security inspections and rink could be made secure and inspected daily by Facility and BIA staff.	• Noise from compressors could impact downtown residents living nearby. • Single season use only with potential start of utility relocations for the Memorial Square • Rink size too large for space. • Potential safety issues with east-west rink layout to allow for full 33.5 metre length requirement (potential hockey play against two parking lot locations and public walkway)	• Medium Cost • Transformer power and capacity could limit use.
Holly Recreation Centre WARD 7	Basketball court	Yes • Yard hydrant for existing volunteer ice rink use.	No • Recreation Centre power supply not sufficient capacity	Yes • Existing fencing for basketball court. • Additional fencing may be required to limit rink size.	Yes • Ample parking next to court	Yes • Basketball court lighting currently used for winter skating.	Yes but located in recreation centre – a distance away (i.e. too far to walk in skates)	• Currently a volunteer ice rink. • Near to recreation centre for amenities (when open) - washrooms, concession stand. • Local neighbourhood context. • School could permit during day. • Currently used for hockey and recreational skating.	• Not close to the waterfront. • Noise from compressors could impact adjacent neighbourhood residents.	• High cost • Excess of \$40,000 for power supply from Recreation Centre
Centennial Park WARD 2	On grass next to beach.	Yes • Water service to washroom building can be adapted for a winter use yard hydrant. • General park water - summer irrigation use only.	Yes • 2 – 200 amp events panels exist – no capacity for use (in series). • 600 amp service in building - new trenching and panel required.	Yes • space is available for security fencing of pipes and compressors.	Yes • Lakeshore Drive • Centennial south parking lot. • Marina parking lot not available – winter boat storage.	No • Potential for flood light off walkway lighting	Yes	• Fairly close to the downtown core. • Past location of Festival of Lights and area used throughout winter by public on the waterfront trail. • Pending the timelines for Centennial Park reconstruction, this location could be extended an additional 1 to 2 seasons to assess the demand for a second artificial ice rink in the City.	• Noise from compressors could impact adjacent downtown residents in condos. • This location cannot be considered as a permanent site as Centennial Park is the prime location for the City's waterfront events and festivals. • Adding a new ice rink location in this park could result in a lower level of service provided at other City-run ice rinks pending the amount of snow removal required to keep this rink functional.	• Low cost • Estimated \$40,000 for power and water supply within park.
John Edwin Coupe Park WARD 2	On sod area next to library	No Winter use • summer irrigation use only	No • Library building does not have capacity for new panel supply	Yes • space is available for security fencing	Yes • Parking lots surrounding building	No • In-direct lighting is possible from adjacent walkways with potential for floodlight	No	• Site close to Downtown Core • Security inspections and rink could be made secure and inspected daily by Facility and BIA staff. • Potential for shinny hockey.	• Site too steep for uniform ice thickness • Area has potential to flood from adjacent parking lot • Snow removal costs to increase as area is used for temporary storage	• High cost • Excess of \$40,000 for new transformer required from street grid (power not available from Library building)
Shear Park WARD 8	On sod area south of washroom building	Yes • Existing ice rink location.	Yes • Currently under-serviced • Servicing already in place for both washroom building and baseball diamond – major upgrades required	Yes • space is available for security fencing • Use ex. pad for compressors	Yes • Angled street parking and within on-site parking lot	Yes • Direct lighting from tennis courts and baseball diamond	No Winter use summer use only. Could be rebuilt in future for year-round use	• Successful existing neighbourhood rink location. • Location removed from residential properties. • Potential as a permanent ice rink location (future multiple programming opportunities) and could be combined with washroom building replacement for year-round programming use.	• Capital costs to upgrade hydro service to park site	• High cost • Excess of \$100,000. • New transformer (convert 2 existing power sources into single supply source). • Would require new 3-Phase hydro pole installations from Innisfil Street.

APPENDIX "B" – Artificial Ice Rink Donation Photographs



Ice Rink Cooling Coils



Ice Rink connections to Compressors



Cooling Supply Pipes



Circulation Pump Electrical Panel



Photographs of 3 compressor units being donated



Photographs of the pump control box and main pipe connectors

APPENDIX "C" - Proposed Artificial Ice Rink Location in Centennial Beach

