



Staff Report

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Report To:	Joint Committees	Report Number: PWD-001-20
Date of Meeting:	September 14, 2020	
Submitted By:	Steve Brake, Director of Public Works	Resolution#: JC-119-20, GG-378-20, GG-416-20, GG-417-20
Reviewed By:	Andrew C. Allison, CAO	
File Number:		By-law Number:
Report Subject:	Ice Skating Trail	

Recommendations:

1. That Report PWD-001-20 be received;
2. That the costs to construct a skating trail be included in a future D.C. Study and by-law; and
3. That all interested parties listed in Report PWD-001-20 and any delegations be advised of Council's decision.

Report Overview

Skating trails have become increasingly popular in many municipalities to provide outdoor winter recreation for residents. Several municipalities in and around the GTA including Brampton, Hamilton, Richmond Hill, and Toronto have built refrigerated skating trails over the last decade. Other municipalities are in varying stages of design for the construction of refrigerated skating trails.

The intent of this report is to provide Council with up to date costs, potential locations, and maintenance requirements for a skating trail in Clarington.

1. Background

- 1.1 At a meeting held on January 20, 2020, the Council of the Municipality of Clarington approved the following Resolution #GG-025-20:

Whereas Clarington has over twenty-one kilometres of trails and is committed to promoting active and healthy living, and

Whereas ice skating trails are currently one of the most popular winter activities in Ontario; and Whereas Clarington residents have expressed a strong support for an ice skating trail in Bowmanville;

Now therefore be it resolved that:

1. Staff investigate and report back on building and operating a one kilometre looped ice skating trail similar to the trail located at Arrowhead Provincial Park in the north quadrant of the former Bowmanville Zoo property, i.e. north of the bridge over Soper Creek, with Staff considering funding options, including having the cost of annual trail construction, operation and maintenance to be paid or subsidized via skate trail / park user fee (i.e. \$20 per vehicle);
2. Staff investigate and report back on alternate or additional future sites for ice skating trails, and potential skate trail connectivity; including:
 - a. The Soper Creek floodplain east of Hobbs Drive (parking at Soper Creek Park and on south side of Highway 2 at Bowmanville Zoo, with easy access to bring in Zamboni);
 - b. The future Camp 30 site.

3. Staff report back on whether ice resurfacing equipment can be borrowed from existing facilities or if specialized equipment needs to be purchased (i.e. a Zamboni attachment for a tractor; water truck);
 4. Staff be invited to seek input from other Municipalities which operate ice skating trails; and
 5. Staff report back to Committee by July 2020 with recommendations for inclusion in the 2021 budget.
- 1.2 Due to delays in receiving detailed information from other sources regarding the design, construction and operation of skating trails, this report was deferred to the first Joint Committees meeting following summer recess still allowing for the project to be considered in the 2021 Capital Budget.

2. Outdoor Ice

- 2.1 Clarington currently has a policy and process in place to assist residents with the provision of natural outdoor ice rinks. Interested parties contact the municipality and if they have a minimum of four volunteers and proof of insurance naming the municipality as co-insured, they can receive training and equipment from the Public Works Department to establish an outdoor rink. Since the policy was established in 2017 there has been limited uptake from the community. To date, only three parks have had outdoor rinks: Tyrone Community Park; Pearce Farm Park; and Guildwood Park. Natural outdoor ice is totally weather dependant and the availability for use has varied each year depending on conditions. Consistently below freezing temperatures are necessary for the development of natural ice.
- 2.2 There are several non-refrigerated skating trails in northern Ontario, including the 1.3 km looped skating trail in Arrowhead Provincial Park, a 1.5 km skating trail at Discovery Harbour in Penetanguishene, and a 1.2 km skating trail at Cranberry Marsh in Bala. The weather conditions in northern Ontario make those skating trails usable for 6-8 weeks each year. There is a fee to use these natural skating trails either per person or per vehicle ranging from \$8-\$20.
- 2.3 The weather in Durham Region during many recent winters has not been conducive to natural ice. Based on historical data, Clarington received on average a total of twenty-five days where the temperature was -10° or colder between the years 2000 to 2009. A future climate summary prepared by the Region of Durham suggests that during the 2040 to 2049-time horizon, there will be zero days when the air temperature will be less than -10° in Clarington. The general trend is towards higher temperatures, less snow and more rain during the winter months in southern Ontario.

- 2.4 Constructing a non-refrigerated skating trail in Clarington is not recommended given our unpredictable weather and the costs and effort required to provide this service for a limited number of days in an average year. Therefore, this report focuses on the potential for a refrigerated municipal skating trail, like others in southern Ontario.

3. Municipal Skating Trails

- 3.1 Refrigerated municipal skating trails are growing in popularity in southern Ontario. At one time outdoor ice rinks were designed as circular or oval pads for public skating and/or hockey. Skating trails provide a unique experience of weaving through snow covered gardens and trees along a curvilinear route. Many skating trails are also used as concrete pathways during other seasons.
- 3.2 The municipalities that have built skating trails report they are extremely well used. Refrigerated skating trails in southern Ontario commonly use a Zamboni or Olympia for ice resurfacing and the equipment is kept on-site for the entire season. The frequency of resurfacing depends on usage but at most municipal locations it is every two hours. The typical length of season for refrigerated skating trails is from early December to late March.
- 3.3 The first refrigerated skating trail in the GTA was built in 2010 at Colonel Samuel Smith Park in Etobicoke. Since then, Brampton, Hamilton, Richmond Hill and Toronto have constructed new refrigerated skating trails. Innisfil Township is in the process of designing a refrigerated skating trail for the 2021 season.
- 3.4 The refrigerated skating trails in other municipalities are typically 200m-250m in length, 4m-5m wide and are free for the public to use. They also include:
- Building to house mechanical, electrical and refrigeration systems;
 - Garage for ice re-surfacing equipment;
 - Heated washrooms and skate change rooms;
 - Lights for evening skating, and audio system; and
 - Parking lot and connecting walkways.

4. Construction costs

Refrigerated Skating Trail

- 4.1 Staff has received information from several municipalities regarding their capital costs for recent and upcoming municipal skating trail projects. There are differences within each, but based on these projects the following estimate was prepared for design and construction of a 250m long, 5m wide refrigerated skating trail, including the additional amenities typically built in conjunction with a skating trail:

Item	Estimated Cost
Skating Trail (1,250m ²) with lighting, audio system, refrigeration equipment and concrete surface <i>Note: the estimated cost is based on a recent consultant estimate of \$1,745 per m² for the Innisfil skating trail</i>	\$2,200,000
Standalone building with washrooms, skate change area, mechanical/electrical room, and Zamboni garage	\$650,000
Parking lot and walkways	\$230,000
Design and construction inspection fees (15% construction value)	\$462,000
Estimated total	\$ 3,542,000 plus tax

Natural Skating Trail

- 4.2 A natural skating trail without refrigeration, while not recommended due to our climate, would still require the installation of a 1,250m² reinforced concrete pad to create a 250m long, 5m wide skating trail. The site would also require parking, walkway connections, and a garage for ice resurfacing equipment. Since its availability would be weather dependant, and much less frequent than a refrigerated skating trail, a portable washroom/skate changing building could be rented each season. Based on the above the approximate costs for a natural skating trail would be:

Item	Estimated Cost
Skating Trail (1,250m ²) with lighting and concrete surface	\$675,000
Parking lot and walkways	\$230,000
Portable Washroom rental/year	\$10,000
Zamboni garage	\$125,000
Design and construction inspection fees (15% construction value)	\$154,500

Estimated total	\$1,184,500 plus tax
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- 4.3 The above estimates are based on the use of existing Clarington ice resurfacing equipment.
- 4.4 The availability of services such as hydro, water, and sewer will affect the actual costs depending on the location.

5. Potential Sites

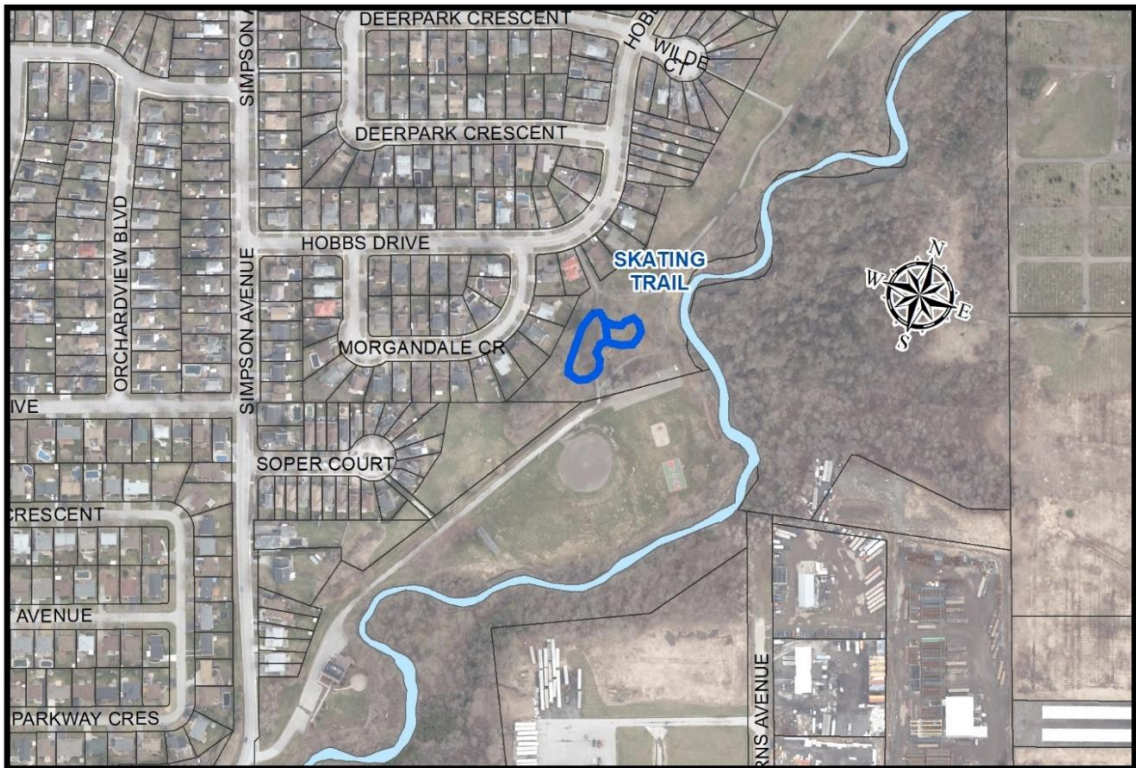
- 5.1 An ideal site for a skating trail would be a relatively flat, natural area to provide a unique experience of skating in an outdoor environment.
- 5.2 Council directed staff to investigate three specific sites: (1) the former Bowmanville Zoo site; (2) Camp 30 site; and (3) Soper Creek Park east of Hobbs Avenue.
- 5.3 Staff have received preliminary comments from CLOCA regarding the feasibility of building on both the former Zoo site and Soper Creek Park as they are both within the floodplain. Given the footprint, grading and electrical components required for a refrigerated skating trail and associated buildings, CLOCA would not support either site if a new building is included as part of the project.

Former Bowmanville Zoo



- 5.4 The former zoo site is large enough to accommodate a 250m skating trail and the other associated amenities i.e. parking lot, standalone building for public use and Zamboni storage. However, because the Zoo site is in the floodplain, a new building could not be included. A building is crucial to house ice resurfacing equipment and the electrical and mechanical components of a refrigerated skating trail as well as public washrooms.

Soper Creek Park East of Hobbs Avenue



- 5.5 Soper Creek Park could physically accommodate a 250m long skating trail east of Hobbs Drive, just north of the existing parking lot and ball field. A skating trail at that location would require the removal of some existing trees and would be approximately 10-15m from the rear yards of existing residences on Hobbs Drive and Morgandale Crescent. Since it would also be located in a floodplain the construction of a new building would not be permitted.

Camp 30/Jury Lands



5.6 The municipality currently does not own the Camp 30/Jury Lands. The site is not in the floodplain so the construction of a skating trail and associated amenities would be permitted. The site currently lacks the services required to operate a skating trail, however the proposed residential development that may occur around the Camp 30/Jury Lands would extend the services to the site. The Jury Lands Urban Design Master Plan, prepared to provide recommendations about future uses, recommends a refrigerated skating trail as a potential feature on the site.

Clarington Fields/South Bowmanville Recreation Complex



- 5.7 Another potential location is Clarington Fields Park. There is space south of the existing Indoor Soccer parking lot to build a 250m skating trail which would not be impacted by the future expansion of the South Bowmanville Recreation Complex. The future indoor recreation complex could provide most of the complementary infrastructure required such as the ice resurfacing equipment, washrooms, a location to house mechanical and electrical equipment, and parking. A Refrigeration Plant would also be included within the South Bowmanville Recreation Complex for the indoor ice at the facility. Based on these complementary uses this site could be the least expensive option to provide a skating trail.

6. Operating Costs

- 6.1 The municipalities contacted for this report did not readily have their annual operation costs available for their skating trails. Municipalities typically resurfaced their ice every two hours between 10:00AM and 10:00PM for a 14-16 week season. Most skating trail sites also have a staffed public washroom/skate change building available for the entire season. Factoring in the costs to keep refrigerated ice for 14-16 weeks, staffing, and utility costs it is estimated that the annual cost to operate and maintain a refrigerated skating trail would be \$250,000.

Funding and Cost Recovery Opportunities

- 6.2 Our Development Charges consultant Watson & Associates provided the following opinion regarding the DC eligibility of a skating trail in Clarington:

“Regarding skating trails, these amenities could be D.C. eligible, although there may be a larger benefit to existing development as it is a specialty amenity that is not currently offered. Before bringing the costs into a future D.C. Study and by-law, a recognition of the benefit to existing development should be considered.”

- 6.3 Typically, new park development is related to growth and is funded 90% from development charges and 10% tax levy. A skating trail would require a greater percentage from tax levy or other non-DC sources due to its benefit to existing development.
- 6.4 While none of the municipalities contacted for this report have implemented user fees for their skating trails, the general consensus was that based on their popularity a user fee could be charged as a way to recover costs for annual maintenance and operating expenses.
- 6.5 Skating trails in northern Ontario, whether on private sites or in provincial parks, do charge for usage based on per person or per vehicle ranging from \$8-\$20. It is therefore reasonable to expect that users would be willing to pay to use an outdoor skating trail in Clarington.

7. Concurrence

This report has been reviewed by the Director of Community Services who concurs with the recommendations.

8. Conclusion

- 8.1 Outdoor skating has always been an important cultural and recreational component of Canadian winters. Climate change has reduced the opportunity for many parts of the country to provide natural ice in outdoor settings, and refrigerated skating trails are becoming more common in municipalities. Municipalities that have built them report that they are extremely popular with residents and visitors.

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- 8.2 The best potential sites in Bowmanville are the Camp 30/Jury Lands and the South Bowmanville/Clarington Fields site. The Camp 30/Jury Lands site is not owned by the municipality and the services required will not be extended to the site until the proposed residential development is constructed. The future ice pads proposed at the South Bowmanville/Clarington Fields site will include a refrigeration plant that could be designed to include an outdoor skating trail. Washrooms and a Zamboni storage area would also be available within the building expansion.
- 8.3 The main reason that skating trails are still relatively rare is the high cost to build, operate and maintain. Based on the comments from our Development Charges consultant Watson & Associates, a large portion of the capital costs to construct a skating trail would have to come from sources other than DC.
- 8.4 There are also many other competing priorities for park and trail funding and using a large portion of DC funds to construct a skating trail in the immediate future would reduce the funds available for the construction of parks and trails in new neighbourhoods.
- 8.5 It is respectfully recommended that the costs to construct a skating trail be referred to a future D.C. Study.

Staff Contact: Peter Windolf, Park Manager, 905-326-3379, Ext. 2307 or
pwindolf@clarington.net.

Attachments: None

Interested Parties:

There are no interested parties to be notified of Council's decision.