

January 25, 2023

Gage Park Budget Amendment Report Supplementary Information

1. Would a curb allow the ice track to open earlier in the season?

Staff explored various materials for curbs, however, they can retain heat and prevent ice from forming. During the warmer months, curbs may impose accessibility issues and can be a tripping hazard.

Staff recommend using snow from indoor ice rinks to build a temporary curb. The natural ice temperature is below zero degrees and would avoid any heat retention issues. In addition, the new refrigeration plant has eight tons of additional capacity, which should improve the performance of the refrigeration track. These measures should allow the ice track to open sooner to achieve the targeted opening date of November 25, 2023.

2. Can other work be undertaken as part of this project (i.e. electrical outlets)?

Staff will undertake a comprehensive review of other work that could take place at Gage Park to minimize the disruption, including power upgrade/electrical outlets, irrigation, and pathway replacement. Since the site's electrical service is at its full capacity, a power upgrade is required to install outlets. Staff will look at the cost and feasibility as part of the comprehensive review of the site.

In order to limit park closure and ensure the skating trails are functional for the 2023/2024 season, staff recommends a two-phased approach over two years. In 2023, staff proposes a limited procurement process for the replacement of the refrigeration plant by November with little to no impact on Gage Park. All work would take place indoors, and no park closure would be necessary. Staff proposes postponing the ice track replacement to 2024 in order to incorporate additional work identified through the comprehensive review and avoid closing Gage Park more than once. Temporary measures would be undertaken to keep the splash pad and playground open for public access. This would further give staff ample time to work with key stakeholders to relocate affected events.

3. What are the projects being cancelled to offset the cost of this work by \$580,000?

The cancelled projects were for the Brampton Civic Centre, related to general mechanical and envelope projects within the annual State of Good Repair Program.



4. What is the life expectancy of the refrigeration plant?

The useful life expectancy of the refrigeration plant is 25 years. The one at Gage Park has reached the end of its useful life. Staff recommends replacing it this year to avoid any potential impact on the 2023/2024 skating season. This can be done without shutting down the park.

5. What is the breakdown of the additional \$1.5M project budget increase?

With the approach recommended above; the funding would be split over two years and two distinct projects. Sufficient funding exists to cover the replacement of the refrigeration plant in 2023. Additional funding will be tabled through the 2024 budget process to address the remainder of the work and any additional scope identified through the comprehensive review.

If Council wishes to continue with the current programme, the following explanation is provided for the budget increase.

The top-up amount is \$1,566,000, which is comprised of three categories - regulatory compliance / unforeseen site conditions and expenses (approximately 46%), scope improvements (approximately 28%) and inflation/market conditions (approximately 26%). A detailed breakdown of the lowest compliant bid is not available, the percentages are based on the Class A cost estimate.

Approvals and Regulatory Compliance (approximately 46%)

- The codes related to fire safety, ventilation and TSSA have changed since the building and systems were installed in the 1990s. Following an inspection, the consultant made the following recommendations to bring the related assets to compliance, which staff accepted:
 - Replace all existing piping between compressors, chiller and evaporative condenser.
 - Update ventilation system, new eyewash station, new fire rated doors, new motor starter panel and new ammonia detection system.
 - Replace existing oil separators, vessels and associated piping.
 - New chiller drip pan, new refrigerant leak detectors.
- Forestry identified additional construction processes to mitigate impacts on existing trees:
 - Certified arborist to oversee excavation, manual labour around tree protection zones, additional hoarding.



Scope Improvements (approximately 28%)

- Scope improvement includes replacing the existing underground headers. These are large distribution pipes that run fluid from the refrigeration plant to different areas of the track.
- Existing headers have a life expectancy of 40 years, they were installed in 1990 and are at 32 years currently.
- The headers could be removed from the scope of work by negotiating with the low bid, although replacing them in the future would be disruptive again to the park and would result in redundant costs.
- Unexpected costs not accounted for:
- Protection of underground services, ammonia removal and recharge.
- Premium for replacing embedded refrigerant tubing (more expensive than estimated).

Inflation/Market Conditions (approximately 26%)