



City of
Peterborough

To: **Members of the Committee of the Whole**

From: **Sandra Clancy, Director of Corporate Services**

Meeting Date: **February 27, 2017**

Subject: **Report CPPS17-011
Creation of Peterborough Memorial Centre LED Lighting
Replacement Project in 2017**

Purpose

A report to recommend the creation of a Peterborough Memorial Centre LED Lighting Replacement project in 2017 with an expanded scope to the original one proposed in the 2017 Capital Budget and alternative financing.

Recommendations

That Council approve the recommendations outlined in Report CPPS17-011, dated February 27, 2017 of the Director of Corporate Services, as follows:

- a) That staff create a capital project for the Peterborough Memorial Centre LED Lighting Replacement in the amount of \$190,000; and
- b) That the funds be transferred from the Community Services – Sustainability Project in the amount of \$158,940 and the 2017 Access Fund in the amount of \$31,060.

Budget and Financial Implications

The estimated cost of the Peterborough Memorial Centre Lighting Replacement is \$190,000, net of the HST 100% Input Tax Credit (ITC) and includes the budget required to provide consulting services to design, tender and administer the work and the actual construction itself. The cost will be funded as described in Chart 1. Chart 2 describes the two parts of the Lighting replacement project.

Chart 1**Proposed Funding for Peterborough Memorial Centre Lighting Replacement**

Year	Funding Source Description	Budget
2017	Community Services - Sustainability Project	\$158,940
2017	Access Fund – Approved by the AAC	\$31,060
2017	Total Budget	\$190,000

Chart 2**Detailed Costs of Peterborough Memorial Centre Lighting Replacement**

Description of Work	Budget
Replace Ice Pad and West and East Seating Lighting	\$140,789
Install new lighting in Stair Aisles	\$31,060
Contingency	\$18,151
Total Cost	\$190,000

Background**Council Motion**

During Budget deliberations on November 28, 2016, Council approved the following motion:

That if grants are not available for the Memorial Centre Ice Pad Lighting Project (page 18 of the Capital Budget Details Book) the money be returned to the Capital Reserve after any expenses associated with the grant submission are paid.

The amount identified for this work was \$225,000. Nothing has been transferred to the Capital Levy Reserve to date as the funding for this project was debenture financing not Capital Levy. Through a separate Report CPPS17-008 also being presented February 27, 2017, it is being recommended that the \$225,000 be re-allocated for a different project.

However, this report is recommending that the project proceed in 2017 at a lower cost and with alternative funding. The lower cost was determined during detailed design which was taking place at the same time as the 2017 budget process.

The existing arena ice lighting consists of 32 - 1000 watt metal halide fixtures that consume 1080 watts each. There are 18 - 400 watt metal halide fixtures in the seating areas. The existing lighting systems are in fair condition and well maintained.

The existing arena ice lighting system produces an average of 75FC's (Foot Candles). There is an area under the score clock that has a lower light level, 64FC's as the clock shadows this area. Based on the current clock location this darker spot will remain even after the LED lighting replacement, although the new lighting design attempts to minimize this effect. This effect is minimized for lacrosse as the score clock is raised by 5 to 10 feet.

The new LED fixtures will use a similar placement to the existing. The targeted light level for an OHL Arena is 150FC's minimum average. Replacing the existing fixtures on a one for two basis (32 fixtures to 64 fixtures) will provide a light level average of 147FC's for ice hockey with the sign in the lower position.

Currently, there is no specific task lighting that covers the stair aisles and when the rows of lights are turned off for events, access via the stair aisle is difficult especially for those with accessibility needs. The new LED stair aisle lighting will provide constant lighting, even when the seating or ice lighting is dimmed or turned off.

The benefits to replace the current lighting with new LED lighting are as follows:

- Virtually no maintenance costs or bulbs to replace, average annual savings of \$2,000;
- Reduction of heat on the ice surface, reducing refrigeration plant costs average annual savings of \$1,000;
- Ability to dim individual rows of lights and instant on, existing metal halide lighting can only be off or on and takes five minutes or more to reach maximum brightness;
- Instant on/off capabilities will significantly increase game production, and would also be a safety feature in an emergency situation during an event when the lights are to be off (not having to wait for them to warm up);
- Improved lighting for stair aisles;
- Better control of the lights is an advantage for events using the floor and for rentals that are not OHL where less FC can be run and save even further;
- Lighting replacement would result in an estimated \$7,535 SaveONenergy Incentive Grant;
- Estimated annual energy savings of \$18,100 for 2017 - 2018 and increased annual savings of 5 -6% dependant on utility rate annual increases, plus a further reduction, by reducing daily electricity demand for the facility;
- The LED Lighting replacement for the Ice Surface, Seating Areas and Stair Aisles provides a payback of approximately 6½ years;
- If the OHL Arena Study were to recommend closure of the Peterborough Memorial Centre, all lighting has a 20 year life expectancy and the lights could be removed and used in the City's other Arenas; and
- Will provide improved lighting for OHL Hockey and Lacrosse and improved TV picture quality.

Impact on Major Tenants

Staff are proposing this work be scheduled between the end of the 2017 Pete's season and prior to the start of the 2017 Lakers season. The project is estimated to take approximately 7 -12 days.

Summary

If Council accepts the recommendations, the Peterborough Memorial Centre Lighting Replacement will be created as a 2017 Capital project and the project would be completed in June 2017.

Submitted by

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