

To: Mayor and Members of Council

From: Development Approval & Planning Policy Department

Meeting: 2013-07-09

Subject: Mayfield Recreation Complex and Albion Bolton Union Community Centre Arena Lighting Retrofit

RECOMMENDATIONS

That Report DP-2013-083 regarding Mayfield Recreation Complex and Albion Bolton Union Community Centre Arena Lighting Retrofit, be received; and

That a new 2013 capital project be approved, in the amount of \$60,000, for the arena lighting retrofit of the Mayfield Recreation Complex and the Albion Bolton Union Community Centre; and

That the new 2013 capital project be funded from a \$30,000 transfer from capital project 12-38 – ABUCC Music Room Renovations and a \$30,000 transfer from the Corporate Energy Reserve Fund; and

That a Request for Tender be released and the contract awarded for the arena lighting retrofit for Mayfield Recreation Complex and Albion Bolton Union Community Centre.

EXECUTIVE SUMMARY

Currently the lighting at Albion Bolton Union Community Centre and Mayfield Recreation Complex Arenas' is inefficient old technology; the proposed project will upgrade both facilities to T5 high output florescent lighting similar to the Caledon East Arena. This has been identified as an action through the Corporate Energy Management Plan.

The new lighting will improve the quality of light at both facilities as well as reduce maintenance and operating costs. The project will cost \$47,500 with incentives considered, have an energy savings of \$7,000 per year and a maintenance savings of \$14,875 for the life of the project. The payback for the combined project is forecasted to be 4.60 years and the expected life of the new T5's is 10 years.

There is budget for the project in cost savings from the Music Room Renovations at Albion Bolton Union Community Centre. The Corporate Energy Reserve Fund established in 2008 has budget for Mayfield Recreation Complex. With the combination of these two projects the Town will benefit in costs due to the scale of the project.

DISCUSSION

Purpose

A lighting retrofit project in Albion Bolton Union Community Centre (ABUCC) and Mayfield Recreation Complex (MRC) addresses a Corporate Energy Management Plan Action while improving lighting quality and energy efficiency.

Background

The Corporate Energy Management Plan (CEMP) was Council endorsed (PD-2010-069) in 2010 as a 3 year plan. Recreation Facility lighting retrofits were identified to be completed under the Equipment Efficiency pillar of the Plan. This project will assist with the completion of the Plan actions.

Currently there are traditional metal halide style lights installed in ABUCC and MRC, in addition ABUCC has some old style obsolete T12 fluorescent lights. This project will retrofit both facilities with T5 High Output (T5HO) florescent fixtures.

T5HO lights are the new standard for installation in arenas; this light technology is installed in the Caledon East Arena with positive feedback from both the public and the maintenance staff. A few benefits of the T5HO technology are as follows:

T5 High Output	Metal Halide
High efficiency – 85 Watts per lumen	80 Watts per lumen
Instantaneous start up	5 minute start up, 15 minute restart
5-6% Efficiency reduction over life time of bulb	35 – 40% efficiency reduction over life time of bulb
Higher Quality of light	More difficult to see contrast
Distributed light	If one bulb fails there will be dark spots
10 year life span	2 year life span

The capital installation for the retrofit of the two facilities has a pay back of 4.6 years and the new bulbs have an anticipated life span of over 10 years. Payback is calculated based on the Capital costs minus the incentives and life time maintenance savings divided by the annual energy savings. Below is the breakdown of the financial benefits of the project:

Project Capital Costs	\$60,000
Incentives through Hydro One's Save on Energy Program	\$12,500
Annual Energy Savings	\$7,000
Maintenance Savings	\$14,875
Payback	4.60 years

The Albion Bolton Union Community Centre is currently undergoing work in the arena involving the Music Room Renovations. The cost for this project is anticipated to be significantly under the original budget allocation. With the additional funds available and the upgrades currently taking place in the arena, staff recommends some of the budget be reallocated to retrofit the lighting.

The Energy & Environment Section has been mandated through the CEMP to complete lighting retrofits in recreation facilities. Through the Corporate Energy Reserve Fund established in 2008, which is replenished with the solar microFIT project revenues, Energy & Environment proposes to allocate some of this funding for the Mayfield Recreation Complex project portion. This will create a larger lighting retrofit project and, with economies of scale there will be a more competitive tender process and the cost per fixture will be reduced.

Staff will also recognize the use of the solar panel revenue for Mayfield Recreation Complex with information provided at the arena renaming ceremony on October 26th.

The project is slated to be completed in August for Mayfield Recreation Complex and early September for Albion Bolton Union Community Centre to ensure the upgraded efficient lighting is installed prior to the hockey season for each respective facility and the Fall Fair at ABUCC.

Financial Implications

Subject to Council approval of this project, a new 2013 capital project will be established for the Lighting Retrofit of the Mayfield Recreation Complex and the Albion Bolton Union Community Centre in the amount of \$60,000 funded from:

\$30,000	Transfer from 2012 capital project 12-38 – ABUCC Music Room Renovations
<u>\$30,000</u>	Transfer from the Corporate Energy Reserve Fund
<u>\$60,000</u>	

The uncommitted balance in capital project 12-38 – ABUCC Music Room Renovations (account 02-08-465-12038-001-69001) is approximately \$80,000. Further, the current balance in the Corporate Energy Reserve Fund (account 08-00-900-35012-000-25000) is \$60,246.

Staff will apply for Hydro One’s “Save on Energy Program” grants to offset the capital cost of this project. If successful, the grant will partially offset the cost of the project and remaining funds, if any, will be returned to the Town’s Tax Funded Capital Contingency reserve (50%) and to the Corporate Energy Reserve Fund (50%).

Applicable Legislation and Requirements

By-law 2009-151 (the Purchasing By-law)

COMMUNITY BASED STRATEGIC PLAN

Strategic Objective 1B– Protect and Enhance Air Quality and Reduce Impacts of Climate Change.

Strategic Objective 1C– Support Green Energy and Energy Reduction.

Strategic Objective 1D– Promote Green Living and Build Community Capacity.

Strategic Objective 2E- Provide a High Quality Public Realm.

Strategic Objective 6A- Provide High Quality Public Services.

Strategic Objective 6D- Improve and Strengthen Long-term Financial Health.

NEXT STEPS

- Complete and Release the Tender
- Evaluate and enter into a contract with the successful proponent
- Have a plaque made indicating the use of the Corporate Energy Reserve Fund and the solar microFIT project revenues for MRC.

ATTACHMENTS

None

Prepared by: Tom Darlow

Approver (L1): Sara Peckford

Approver (L2): Mary Hall

Approver (L3): Douglas Barnes

Approver (L4):

Approver (L5):