



REPORT

TO: Mayor Lawlor and Members of Council

FROM: Stephen Hamilton, Manager Facilities Capital Projects

DATE: May 29, 2023

REPORT NO.: RP-2023-004

SUBJECT: Award of Contract for Acton Arena Transformer Replacement

RECOMMENDATION:

THAT Report No. RP-2023-004 dated May 29, 2023 regarding the Award of Contract for the Acton Arena Transformer Replacement be received;

AND FURTHER THAT Council approve the award of the tender for the Acton Arena Transformer Replacement to MultiTech Trades Corporation, 2025 Meadowvale Blvd., Mississauga ON L5N 5N1

AND FURTHER THAT Council authorize the Senior Manager of Purchasing and Risk Management to issue a purchase order to MultiTech Trades Corporation of 2025 Meadowvale Blvd Unit #2 Mississauga ON L5N 5N1 in the amount of \$851,290 +HST as outlined in this report

AND FURTHER THAT Council approve a capital budget increase of \$428,028 from \$4,829,084 to \$5,257,112 to the arena heat recovery and dehumidification projects for the transformer upgrade at the Acton Arena and Community Centre as outlined in this report;

AND FURTHER THAT Council approve the capital budget increase of \$428,028 be financed by CCRF grant funding as outlined in this report;

KEY POINTS:

The following are key points for consideration with respect to this report:

1. The design of the new heat recovery system and the incorporation of a new dehumidifier in the Acton Arena, Townsley Rink has advanced the need for a transformer upgrade at this facility. Future capital projects at this facility focusing on significantly reducing GHG emissions through the use of electrification to replace gas fired equipment will further advance the need for transformer capacity to meet calculated peak loads.
2. A transformer upgrade has been identified through a capital budget increase approved by Council on May 2, 2022. Report RP-2022-0009 approved a capital budget increase of \$768,225 to the existing available capital budgets for the Arenas heat recovery and dehumidification projects to allow for increased scope of works to complete the projects as required. The additional scope of works included design and engineering works for a transformer replacement at AACC, electrical service upgrades for MMSP and added design and engineering scopes of work for both arenas. These budgets were sourced from the Canada Community Building Fund, the Capital Replacement Reserve and additional funding from the Canada Community Revitalization Fund (CCRF).
3. These arena heat recovery and dehumidification projects have multiple elements of design and construction in both arenas, with the work of multiple constructors, suppliers and bids being coordinated. The transformer construction is the last of the projects being bid under these multiple projects.
4. RP-2022-0009 identified “other available funds” in the amount of \$1,018,860 that formed a significant portion of the budget for these projects. Subsequent to RP-2022-0009 the Town received an additional \$428,070 of funding from the CCRF for one of the four (4) arenas projects within the bundled group of these projects. Applying these funds as an addition to the project increases the budget for the completion of the project.

BACKGROUND AND DISCUSSION:

The Acton Arena and the Mold-Masters Sportsplex are facilities with older infrastructure from the earlier phases of design and construction. Both facilities require the replacement and upsizing of capacity for their dehumidification systems. Additionally, both facilities will require replacement of multiple components of their HVAC systems in the near future. The identified dehumidification and HVAC equipment are all at the end of their life cycle.

The Acton Arena and Community Centre has its original 500 KVA transformer from the construction in 1997. During the expansion in 2015 estimates were completed with regards to the anticipated peak loads of the existing and new equipment on the facility. It was determined that the existing transformer would still have capacity to deliver the necessary power to the facility.

The new dehumidification equipment utilizes heat recovered from the refrigeration system, therefore eliminating the need for this equipment to be direct gas fired and significantly reducing the GHG emissions of the facility. The introduction of this system and the electrification of key components has increased the anticipated peak loads of the overall electrical system. Future demand will exceed load capacity, particularly in the ice refrigeration shoulder seasons when external temperatures increase the demand for refrigeration and dehumidification in the facility.

The current transformer is connected to the 8.32 KVA feed on Queen St in Acton. The transformer is owned by Halton Hills Hydro. A larger capacity transformer will require connection to a larger capacity feed. The next step up for available feed in this area of Acton is a 44KVA feed. As per Halton Hills Hydro “Conditions of Service” requirements to connect to the larger power feed with a significantly upgraded transformer size, the transformer and associated works must be owner purchased as opposed to being owned by the utility.

The project team, led by the design consultants from Efficiency Engineering, have been working with Halton Hills Hydro staff through this process to understand and develop the necessary requirements of the facility and the utility for power supply in the short term and for the foreseeable future. The scope of works and costs associated for the transformer replacement have increased from the previous CLASS D budget estimate identified in RP-2022-0009

The transformer upgrade was designed through Efficiency Engineering and tendered on February 24, 2023. The bid documents were downloaded by ten (10) vendors and three (3) vendors submitted bids for the tender.

Company	Location	Tender Amount (excluding HST)
MultiTech Trades Corp	Mississauga	\$851,290.00
Electrobauer Systems Limited	Unionville	\$914,800.00
ERTH (Holdings) Inc.	Ingersoll	\$1,226,051.00

MultiTech Trades Corporation was the low bid that met the requirements of the tender.

STRATEGIC PLAN ALIGNMENT:

This report aligns to the Town’s Strategic plan recognizing the value to provide responsive, effective municipal government and strong leadership in the effective and efficient delivery of municipal services.

This report also identifies climate change and the environment as one of the Town’s Strategic priorities.

RELATIONSHIP TO CLIMATE CHANGE:

This report impacts and/or helps address climate change and the Town's Net Zero target through corporate energy savings.

PUBLIC ENGAGEMENT:

Public Engagement was not needed as this report is administrative in nature.

INTERNAL CONSULTATION:

This report has been reviewed with staff of Finance, Purchasing and Recreation & Parks.

FINANCIAL IMPLICATIONS:

This report has an immediate financial impact and requires a funding source.

As noted above, the project budget will need to increase by \$428,028 from \$4,829,084 to \$5,257,112 based on the tendered amount for the transformer upgrade at the Acton Arena and Community Centre.

As shown below, the existing project budget for the arena heat recovery and dehumidification project is \$4,829,084, which results in a budget shortfall of \$428,028. The required additional funding will be financed by the Canada Community Revitalization Funding approved in 2022.

	Financing			Capital Replacement Reserve
	Budget	CCBF Grant	CCRF Grant	
Existing project budget				
as per Council Report RP-2022-0009				
8251-06-1901 MMSP Replace Dehumidifiers	\$ 585,000	\$ 150,000		\$ 435,000
8251-02-2224 MMSP LCDB Phased Dehumidification	\$ 1,225,112			\$ 1,225,112
8251-02-2223 MMSP LCDB Heat Recovery System	\$ 859,930		\$ 321,930	\$ 538,000
8211-02-2210 Acton Arena LCDB Heat Recovery System	\$ 860,930		\$ 321,930	\$ 539,000
8211-02-2204 Acton Arena LCDB Dehumidification Unit	\$ 1,298,112		\$ 375,000	\$ 923,112
Total	\$ 4,829,084	\$ 150,000	\$ 1,018,860	\$ 3,660,224
Revised Project Budget per RP-2023-0004				
Award of Contract for Acton Arena Transformer Replacement	\$ 428,028			
Total & Revised Financing	\$ 5,257,112	\$ 150,000	\$ 1,446,888	\$ 3,660,224
Transfer (to)/from Reserves & Grants	\$ 428,028	\$ -	\$ 428,028	\$ -

Reviewed and approved by,

Simone Gourlay, Senior Manager of Purchasing and Risk Management

Moya Jane Leighton, Director of Finance & Town Treasurer

Paul Damaso, Commissioner of Recreation & Parks

Chris Mills, Chief Administrative Officer