



REPORT

TO: Mayor Lawlor and Members of Council

FROM: Johanna Amaya-Carvajal, Supervisor of Facility Capital Projects

DATE: May 29, 2023

REPORT NO.: RP-2023-007

SUBJECT: Town Hall Bundled HVAC Replacement Project Update

RECOMMENDATION:

THAT Report No. RP-2023-007, dated May 29, 2023, for the Town Hall bundled HVAC project update be received;

AND FURTHER THAT Council approves a budget increase of \$160,600 from \$1,516,988 to \$1,677,588 to the Town Hall Bundled HVAC Replacement Projects as outlined in this report;

AND FURTHER THAT the budget for 8400-02-1702 (the Town Hall Replace Heat Pumps project) be increased by \$160,600 and the increase be funded by the Capital Replacement Reserve as outlined in Report RP-2023-007.

KEY POINTS:

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

- The Town hall's HVAC system is comprised of 52 Heat Pumps and Make-Up Air Handling Unit (MUA) and are original equipment. All are at the end of life and require replacement.
- The new HVAC equipment is necessary to maintain existing service levels within the facility and are an integral part of the low carbon design approach to equipment replacement contributing significantly to the reduction of GHG emissions in the facility.
- Council Report RP 2022-0015 was approved in July 2022, in the amount of \$1,516,988 with a less than 3% contingency. The project has encountered significant extras as a result of unknown site conditions.

- Maintaining the schedule of the project and ongoing HVAC services to Town Hall Change Orders require immediate approval which will exceed the current approved budget.

BACKGROUND AND DISCUSSION:

The Town Hall HVAC system is comprised of several pieces of equipment that provide heating, cooling, and ventilation to the facility. The major components of the system are the fifty-two heat pumps dispersed throughout the building and the make-up air (MUA) unit housed in the third-floor mechanical room. These pieces of equipment are at the end of their life cycle and were budgeted for replacement. These projects (i.e., Bundled mechanical renovation projects) include:

- 8400-02-1702 Town Hall Replace Heat Pumps
- 8400-02-1703 Town Hall MUA Replacement
- 8400-02-2001 Town Hall Air Handling Unit
- 8400-02-2201 TH Domestic Water Main Replace
- 8400-02-2210 TH LCDB Fittings and Equip

The Town has engaged McCallum Sather, consultants to design and engineer, and LCD Mechanical Inc. to purchase and install the new systems for both the MUA and heat pumps to ensure a more energy efficient low carbon system that will be compatible with next phases of the project to achieve net zero within the facility.

As part of Council Report RP 2022-0015, at the time of Tender and Award of LCD Mechanical, the building automation systems (BAS) scope of work was removed from the tender to reduce project costs and minimize budget increases. Subsequent to the installation it was discovered that individual controllers were required to be included as part of the installation for the remaining included scope of work. Additional change requirements resulted from unknown site conditions impacting installation of roof top and ceiling units alike. The cost for these additions and construction changes is approximately \$146,600 including non-recoverable HST and a contingency of \$14,000 is included to ensure sufficient budget for any unforeseen changes while completing the remaining scope of work.

STRATEGIC PLAN ALIGNMENT:

This report aligns to the Town's Strategic plan recognizing the value to foster a healthy community that provides a clean environment and range of economic and social opportunities to ensure a superior quality of life in our community.

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.

The replacement of the existing gas fired makeup air unit with an electric dedicated outdoor air system with built in heat recovery, along with other components of the project is expected to result in 32 tCO₂e of annual GHG savings. This is approximately a 47% reduction in Town hall's annual greenhouse gas emissions (GHG).

This project was originally identified through the Town Hall Low Carbon Design Brief which was conducted in 2020 to develop a 10-year plan to achieve net zero GHG emissions by 2030. More specifically, this project is the first step in the pre-selected Pathway 2, Stage 1 of the ADMIN-2020-035 Low Carbon Design Brief for Town Hall.

PUBLIC ENGAGEMENT:

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

INTERNAL CONSULTATION:

Finance was consulted in the preparation of this report. The Finance staff are in agreement with the recommendations.

FINANCIAL IMPLICATIONS:

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

The five Town Hall bundled HVAC projects included in this report have an approved total budget of \$1,516,988 as noted in the following table:

	Budget	Financing	
		Canada Community Building Fund (CCBF)	Capital Replacement Reserve
Existing project budget			
Town Hall bundled HVAC projects	\$ 1,452,374	\$ 345,000	\$ 1,107,374
Report RP-2022-0015 (previously approved)	64,614		64,614
Total	<u>\$ 1,516,988</u>	<u>\$ 345,000</u>	<u>\$ 1,171,988</u>
Revised Project Budget			
Equipment Replacement per T-083-22	\$ 1,472,804		
BAS controllers	146,600		
Other costs (including contingency)	58,184		
Total	<u>\$ 1,677,588</u>	<u>\$ 345,000</u>	<u>\$ 1,332,588</u>
Transfer (to)/from Reserves	\$ 160,600	\$ -	\$ 160,600

The additional costs result in a project shortfall of \$160,600 in the bundled projects. As a result, project 8400-02-1702 (the Town Hall Replace Heat Pumps) will be increased by \$160,600 and the shortfall will be financed from the Capital Replacement Reserve.

Reviewed and approved by,

Stephen Hamilton, Manager of Facility Capital Projects

Moya Jane Leighton, Director of Finance & Town Treasurer

Paul Damaso, Commissioner of Recreation & Parks

Chris Mills, Chief Administrative Officer