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Town of Aurora

General Committee Report

No. CMS23-012

Subject: Approval of Capital Project No. 72478 - Sports Dome - Air Conditioning

Prepared by: Doug Bertrand, Manager of Facilities Management

Department: Community Services

Date: April 18, 2023

Recommendation

1. That Report No. CMS23-012 be received; and
2. That the condition on the approval of a total of \$155,000 in capital budget authority for Capital Project No. 72478 – Sports Dome Air Conditioning be lifted, and the project proceed; and
3. That \$40,000 in previously approved budget authority and its associated funding be transferred from Project No. 72460 – Aurora Sports Dome Retrofit to Project No. 72478 – Sports Dome Air Conditioning.

Executive Summary

This report seeks Council approval to proceed with Capital Project No. 72478- Sports Dome Air Conditioning. Council requested additional information to clarify the increased budget request.

- Pre-purchase – Letter of Opinion provided general recommendations.
- The initial estimate (project 72460) was developed with the best information available at the time.
- Equipment at the time of purchase was later determined to be not suitable for installation.
- Community use and Town programming would benefit from the addition of air conditioning in the summer months.

Background

In anticipation of capital work needed for the Dome (prior to Town ownership), a placeholder was created in the 10yr capital plan to replace the Dome Turf. Even though the Dome was operated by a third party, the Town remained responsible for certain capital repairs. This project was set as a placeholder to take place in 2026.

The Town purchased and took possession of the Dome assets on March 31, 2021.

On April 20, 2021, staff brought forward report No. CMS21-016 outlining a few operational matters and recommended to bring forward the capital project to utilize the funds set aside in Capital Project No. 72460 – Aurora Sports Dome Retrofit. This project had various components including the replacement of artificial turf (\$500,000) and mechanical upgrades (\$100,000), for a total capital budget authority of \$600,000.

As part of this approval, required capital work was identified:

- Replacement of Artificial Turf
- Club House HVAC Exhaust Fans
- Air Conditioning for Air Bubble
- Club House HVAC Roof Top Units
- Hot Water heater

To allow this work to proceed at the most opportune time in the dome's operation, staff requested that Council approve funding for this work in April 2021. This proposed project was funded through the issuance of long-term debt financing which will be repaid through future dome operating revenues.

All work identified in project #72460 has been completed or is in progress except for the Air Conditioning. The artificial turf and hot water tank have been replaced. The remaining HVAC work has been awarded to a contractor and waiting for delivery of the equipment; work is estimated to be completed in April. The only outstanding item within the original budget is the Air Conditioning.

A portion of the mechanical work included installation of used air conditioning equipment included with the acquisition of the sports dome. A report prepared prior to the purchase indicated the air conditioning equipment could be reinstalled, and some additional components would need to be purchased/ installed to provide the dome with air conditioning. However, upon further investigation, the manufacturer of the unit confirmed the existing coil was not suitable for reuse.

Analysis

Pre-purchase – Letter of Opinion provided general recommendations.

Prior to purchasing the Dome, Town staff arranged to have a preliminary review completed by an Engineer. The purpose of the review was to ascertain an understanding of the existing space's mechanical systems. Engineering also provided general comments on the equipment condition, capacities, life expectancy of equipment, expected replacement timelines and any code related issues which would have to be addressed.

Based on the review, the Town received a Letter of Opinion that provided some general recommendations. It should be noted that the letter contained a disclaimer as there was little information available at the time of the site review.

The initial estimate (project 72460) was developed with the best information available at the time

Based on the above information available prior to purchase, Staff needed to develop the budget to the best of their ability. The budget for the HVAC and Turf replacement was based upon the best information available at the time including, verbal information provided by the previous owner, Letter of Opinion, and consultation with a consultant on the turf replacement.

Equipment at the time of purchase was later determined to be not suitable for installation

The supply air unit was originally equipped with a cooling coil. The coil was removed at some point in its operation to reduce the pressure loss at the fan inlet. The coil was stored on site by the previous owner, and their intentions were to reinstall at some point to air condition the dome in the summer months. The facility has operated since new without air conditioning. Town staff felt air conditioning would allow for improved indoor conditions and increased summer programming. The dome is underutilized during the summer months, primarily due to the heat. During the day the heat builds up in the dome and by late afternoon and into the evening it is typically hotter inside the dome than it is outside.

A report prepared prior to the purchase indicated the coil could be reinstalled and the associated cooling equipment purchased/ installed to provide the dome with air conditioning. A portion of Project # 72460 (\$40K) was to reinstall the coil, however upon further investigation, the manufacturer of the unit confirmed the existing coil was not suitable for reuse as it was designed to be used in conjunction with a chilled water

system rather than a direct expansion (gas) system. A chilled water system cannot be used as the building Electrical service is insufficient. This budget estimate includes engineering services required to assist with design specifications, supply and installation of new coil, condenser, controls, and electrical provisions.

Upon learning that the existing coil was not compatible, staff utilized the services of second engineer to develop a detailed budget. The results of this were outlined in the 2023 request for additional funding (Attachment 1).

This budget estimate includes engineering services required to assist with design specifications, supply and installation of new coil, condenser, controls, and electrical provisions.

Community use and Town programming would benefit from the addition of air conditioning in the summer months.

Current community user groups and potential new permit holders have expressed a desire to permit the dome during summer months, especially for competitive programs, tournaments, and specialized training/clinics so that they do not risk cancellation due to inclement weather. However, these same groups identify the heat as a significant deterrent and most do not proceed with renting the dome. The Sports Field Development Strategy (2020), supported and again in the Draft (2023) Parks and Recreation Master Plan, recommends that the Town “investigate the potential to add air conditioning to maximize usage during the summer months”.

The dome is also utilized by Town recreation summer camp programs, and the provision of air conditioning would provide a more comfortable indoor environment for camp participants.

Advisory Committee Review

None

Legal Considerations

None.

Financial Implications

Based upon the above presented additional information, it is recommended that the condition on the approval of a total of \$155,000 in capital budget authority for Capital Project No. 72478 – Sports Dome Air Conditioning be lifted, and the project proceed.

As noted above, the approved budget authority for Project No. 72460 – Aurora Sports Dome Retrofit includes \$40,000 in support of the dome's air conditioning system. It is recommended that this previously approved budget authority and its associated funding be transferred to Project No. 72478.

Project No. 72478 will be fully funded from the Sport Dome's reserve. The Sport Dome reserve is solely funded from its annual net operating revenues. This reserve also received a one-time cash injection through a recent debenture issue. As this reserve does not rely upon the tax levy as a funding source, this project will not have an impact on the Town's taxpayers.

Communications Considerations

The Town will inform the public of the information contained in this report by posting it to the Town's website.

Climate Change Considerations

Adding air conditioning to the sports dome will increase utility cost and add the Town's greenhouse gas emissions

Link to Strategic Plan

Proceeding with the Capital Project No. 72478 supports the Strategic Plan's goal of:

Supporting an exceptional quality of life, for all in its accomplishments in satisfying requirements in the following key objectives within these goal statements:

- ***Encourage an active and healthy lifestyle.***

Alternative(s) to the Recommendation

1. Council may choose not to approve Capital Project No. 72478
2. Council may provide further direction

Conclusions

The purpose of the Capital Project – Sports Dome Air Conditioning installation is to support community user groups and potential new permit holders desire to permit the dome during summer months, especially for competitive programs, tournaments, and specialized training/clinics so that they do not risk cancellation due to inclement weather. The sports dome is also utilized by Town recreation summer camp programs, and the provision of air conditioning would provide a more comfortable indoor environment for camp participants. Installation of air conditioning will temper the air to maximize usage during the summer months.

Attachments

Capital Project No. 72478 - Sports Dome - Air Conditioning

Previous Reports

CMS21-016 - Aurora Sports Dome Financing, Permit Fees, Reserve Account, and Capital Works, April 20, 2021

Pre-submission Review

Agenda Management Team review on March 30, 2023

Approvals

Approved by Robin McDougall, Director, Community Services

Approved by Doug Nadorozny, Chief Administrative Officer