

2019 Capital Budget Amendment – Kinsmen Leisure Centre Expansion & Modernization**Report Purpose**

To amend the 2018 Capital Budget to change the scope of the Kinsmen Leisure Centre Expansion & Modernization to change the Heating, Ventilation & Air Conditioning (HVAC) equipment.

Recommendation

THAT an amendment to 2018 Capital Budget to change the scope of the Kinsmen Leisure Expansion and Modernization to change from gas fired roof top units to hydronic roof top units within existing budget, be approved.

Our Prioritized Strategic Goals

Goal 2 - Manage, invest and plan for sustainable municipal infrastructure

Goal 4 - Ensure effective stewardship of water, land, air and energy resources

Goal 6 - Provide facilities and services that are available and accessible to residents

Report

Strathcona County is committed to making decisions that are anchored by solid reasoning based on the principles of sustainability. The journey toward sustainability began in 2002 with Strathcona County adopting a solid vision that supported pursuing Community Energy solutions. Centre in the Park (CITP) was an ideal location for community energy as it had a combination of existing/aging infrastructure and new development that would create diverse loads for the system. Currently, the system supports six municipal and six private buildings. The benefits of the system include: a more efficient use of energy, reduction in greenhouse gases, safer buildings and opportunity for alternative technologies that will create system resiliency.

1. Mandatory requirement to connect

With a vision set for the Centre in the Park development to use Community Energy, Strathcona County works with each developer to understand the requirements of connecting their new building to the system. This is achieved through a memorandum of understanding during the development phase and transitions to a long-term energy agreement with the occupants/owners. Through this process, Strathcona County outlines technical requirements to ensure that all buildings are designed, constructed or retrofitted (future) in a way that is beneficial to the system.

Developers have been required to connect all space heating and domestic hot water capacities to the system. Exemptions have only been made in two circumstances:

- 1) Make-up air for the parkade due to the intense heating requirements at the doors that help prevent heat loss during winter months.
- 2) Multi-unit commercial spaces that have diverse heating needs and high turnover of tenants.

As municipal buildings are retrofitted or additions are constructed, connecting all space heating and domestic hot water capacities aligns with the Centre in the Park vision and holds our actions equivalent to the expectations of the private sector.

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Director(s): Diehl Townsley, Facility Services, Laura Probst, Financial Services

Associate Commissioner, Division: Lori Cooper, Corporate Services; Gregory J. Yeomans, Financial and Strategic Management

Lead Department: Facility Services

2. System and building efficiencies

- With the existing community energy system infrastructure already in place at these municipal buildings, it makes sense to capitalize on the existing investment.
- Adding domestic hot water and space heating loads will increase energy revenues for the system.
- One single point of control for operations allows for better management of the supply and demand of heat, which avoids unnecessary production while still meeting building and system needs.
- Reduces the maintenance and replacement costs that are associated with having multiple systems in the building to operate.
- Introduces opportunities for future renewable energy sources which would otherwise not be economical or practical.

The preliminary mechanical design for heating the new universal change room and filter room additions for the project included natural gas fired HVAC equipment. During the preliminary design and after consultation with the County regarding the Community Energy System connection requirements, the consultant concluded that natural gas fired roof top units were the least initial cost-effective system to purchase and install, not considering the County's long-term sustainability objectives.

To maintain and support our current practice of utilizing the district energy system, the design has been modified to align with Centre in the Park district requirements. Rather than using gas fired equipment, modifications will be made to connect to the community energy system. Fees for the additional design work were approved and a preliminary design was completed changing the natural gas fired roof top units to hydronic roof top units and increasing the glycol heat exchanger's capacity. The contractor was then tasked to complete a construction costs estimate for the change. Once the design costs, an estimated value of construction and the associated costs for Utilities department to upgrade the Community Energy equipment were obtained, the Facility Services' project manager determined that the change (valued at \$180,000) could be managed within current budget. The typical project contingency for a project of this scale is 10% of the construction value. This change reduces the project contingency to just under the 10% value.

Year	2018	2019	2020	Total
Expenditure by Year	\$140,000	\$2,000,000	\$2,860,000	\$5,000,000

Council and Committee History

December 6, 2018 Council approved the 2019 Capital Budget
 December 4, 2017 Council approved the 2018 Capital Budget

Other Impacts

Policy: FIN-001-024: Financial Reserves; FIN-001-027: Tangible Capital Assets Financial Reporting Policy

Legislative/Legal: n/a

Interdepartmental: Recreation, Parks and Culture, Facility Services, Utilities, Procurement Services, Legislative & Legal Services

Master Plan/Framework: Corporate Asset Management

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