



Staff Report for Decision

File Number: D641

DATE OF MEETING NOVEMBER 4, 2019

AUTHORED BY MIKE STRAIN, SENIOR PROJECT MANAGER, ENGINEERING & PUBLIC WORKS

SUBJECT FIRE STATION NO. 1 – LEED CERTIFICATION

OVERVIEW

Purpose of Report

To seek Council exemption from pursuing LEED certification for the Fire Station No. 1 Project. |

Recommendation

That Council exempt the Fire Station No. 1 Project from the LEED certification requirement in the Green Building Strategy.

BACKGROUND

Council adopted a Green Building Strategy policy requiring new City owned buildings, 900 square metres or larger, to be certified LEED Gold under the Canada Green Building Council (CaGBC).

The policy includes an exemption for a building project from the LEED process where it can be demonstrated that it contains green equivalent features. Staff have found a number of challenges with following LEED certifications, including:

- an apparent disconnect between meeting the LEED certification requirements and meeting other City policies and priorities (particularly with respect to energy conservation and greenhouse gas emissions reduction).
- the difficulty to apply to a broad range of building types and sizes.
- the documentation requirements for certification.
- the length of time (and cost) for the certification process to be completed.
- the responsiveness of the CaGBC to certification applications. |

DISCUSSION

From the outset, the Fire Station No. 1 Project has followed an integrated approach, with the entire project team working together to incorporate LEED equivalent green and sustainable building features from the beginning, rather than as an afterthought. The key focus has been on energy performance and greenhouse gas (GHG) reduction, rather than certification.

Examples of LEED equivalent and sustainable building features include:

- High energy efficiency: anticipated 25% - 31% improvement in general energy use over the MNECB (Model National Energy Code for Buildings).
- Anticipated 22% GHG Reduction compared to the MNECB.
- High efficiency ventilation equipment meeting requirements of Level 3 of the Energy Step Code.
- Double paned / thermally broken windows.
- Low window to wall ratio (19.4%).
- Diversion of storm water from storm system using pavers in parking area.
- Rain gardens to capture and clean storm water.
- Incorporating low flow, ultra efficient fixtures.
- Automatic bi-fold appliance doors that open and close 5% faster, reducing heat loss.
- Motion sensor lighting.
- Use of LED lighting and natural lighting.
- Electric vehicle charging stations.
- Indoor and outdoor bicycle racks.

It is estimated that the professional fee for pursuing LEED certification would be around \$200,000, would require additional staff resources, and add approximately four months to the design period. If LEED Gold is required, further potential cost increases can be anticipated for construction, and are estimated at approximately 5% to 8% of the construction costs.

The intent of the request for exemption from the LEED certification is to avoid financial and schedule burden brought about by onerous documentation requirements. |

OPTIONS

1. That Council exempt the Fire Station No. 1 Project from the LEED certification requirement in the Green Building Strategy.
 - Although a formal certificate would not be received, by incorporating LEED equivalent green and sustainable building features, many of the benefits of LEED will still be realised. Existing project timelines for design, tendering, and construction would not be affected, and there is no impact to design and construction costs.
2. That Council not exempt the Fire Station No. 1 from the LEED certification process.
 - This option would provide the Fire Station No. 1 with formal LEED certification; however, would impact design and construction costs, schedule, and require additional staff resources to manage the LEED certification process. This would delay the design, tendering, and construction. The additional costs for fees or construction impacts are not currently included in the budget.

SUMMARY POINTS

- Council may exempt a building from the LEED certification process where it can be demonstrated that the proposed building contains LEED equivalent green features.
- LEED equivalent and sustainable building features are being incorporated into the design and construction of Fire Station No. 1.
- Although Staff is not recommending pursuing LEED certification, due to cost and schedule, many of the benefits will still be realized, in addition to improved energy performance and greenhouse gas reduction.

Submitted by:

Mike Strain
Senior Project Manager,
Engineering Projects Section

Concurrence by:

Bill Sims
General Manager,
Engineering & Public Works

Dale Lindsay
General Manager,
Development Services |