

COMMUNICATION # CC-2022-0256

TITLE: S4 – Crescent View Lift Station – Request for ICIP Funding

TO: City Council

FROM: Engineering Services Department

DATE: October 13, 2022

PUBLIC: PUBLIC DOCUMENT

RECOMMENDATION

THAT City Council approve of the application for the Investing in Canada Infrastructure Program (ICIP) funding for the S4 - Crescent View Lift Station project.

THAT the City of Moose Jaw agrees to meet legislated standards, to meet the terms and conditions of the ICIP program, to conduct an open tendering process, to manage the construction of the project, to fund the municipal share of the project, to fund ongoing operation and maintenance costs, and to follow any mitigation measures as required by the federal *Impact* Assessment Act and The Environmental Assessment Act (Saskatchewan).

EXECUTIVE SUMMARY

The purpose of this report is to seek approval of City Council to apply for ICIP funding under the Green Infrastructure Stream for the S4 – Crescent View Lift Station replacement project which is currently in progression through the City's contracted consulting firm, AECOM.

City Council approval is required to meet the submission requirements of this Provincial Program, the application deadline for funding is November 29, 2022.

BACKGROUND

The City had retained AECOM Canada Ltd., in August 2021, for engineering services to replace the existing Crescent View Wastewater Lift Station. The current lift station is located at the east end of Manitoba Street E, next to Moose Jaw Creek, and was constructed in 1961 with upgrades occurring in 1991. The citywide wastewater collection system is conveyed to this station and then pumped to a grit building at the headworks of the City's wastewater treatment plant (WWTP).

The current Crescent View Lift Station does not have the capacity to manage surcharging events during rainstorms. The lack of capacity leads to flooding of the grinder room during significant wet weather conditions. The station has limited space for system expansions to accommodate surcharging events. To meet the current and future flow rates, AECOM recommends the full replacement of the lift station.

An existing septage receiving station is located approximately 100 m upstream of the existing Crescent View Lift Station, where septage mixes with the City's wastewater collection sewer before being pumped to the WWTP. The station does not provide the level of service required by the City. Issues include a history of overflow, lack of means to detect prohibited loads, lack of treatment and lack of flow equalization.

The current sewage system layout does not provide grit removal protection prior to the Crescent View Lift Station., There is increased pump wear and grit deposits to the downstream infrastructure due to the lack of grit protection. Several existing grit building components are at the end of their life cycle and require replacement.

DISCUSSION

Crescent View Lift Station is below required capacity, past its life expectancy, requires extensive and expensive repairs, is incorrectly configured with grit removal after pumping and is restricting growth of the City.

AECOM has recommended replacing the Crescent View lift station to function as a WWTP headworks building by providing full-flow screening and grit removal. The key factors influencing design are pumping capacity, screening, grit removal and septage receiving location, practical considerations with respect to retrofitting an existing facility or new construction, and regulatory requirements.

AECOM's recommendation is to replace Crescent View with one integrated headworks facility to meet the following objectives:

- Design for the anticipated flows associated with the wastewater collection system serving a population of 45,000 people.
- Provide screening and grit removal (primary treatment) system with the capacity for a 1:25 year storm event.
- Provide an upgraded pumping system with capacity for a 1:25 year storm event.
- Provide upgraded septage receiving and potable water truck fill systems.

FINANCIAL IMPLICATIONS

The total budget expectancy for the Crescent View Lift Station replacement project is \$26,655,000. Eligible costs submitted to ICIP are \$23,780,000. If approved, these eligible costs would be shared according to the below table:

The federal and provincial funding contributions will vary depending on the funding stream and the applicant type.

Applicant Type	Federal ICIP Contribution	Provincial ICIP Contribution
Municipal	At least 40% *	Up to 33.33%
Non-Profit	Up to 40%	Up to 33.33%
Indigenous	Up to 75%	Up to 25%
Private Sector – For-Profit	Up to 25%	0%

^{*}Contributions listed above are estimates. Actuals will be confirmed upon project approval from the Government of Canada.

OPTIONS TO RECOMMENDATION

- THAT City Council does not support the recommendation as presented.
- THAT City Council provide alternatives to the recommended action.

STRATEGIC PLAN

This report supports the City's long-term strategic plan by falling under Objective #4 – Core Amenity and Services.

PRESENTATION

Mr. Jim Puffalt, City Manager, will introduce the report. Mr. Bevan Harlton, Director of Engineering Services, will provide a brief overview of this report.

ATTACHMENTS

A. ICIP Funding Application

REPORT APPROVAL

Written by: Bevan Harlton, Director of Engineering

Reviewed by: Tracy Wittke, City Clerk

Approved by: Jim Puffalt, MBA, CMMA, RMA, City Manager

Approved by: Clive Tolley, Mayor

To be completed by the Clerk's Department only.

Presented to Regular Council or Executive Committee on _____

Resolution No.

Report Approval Details

Document Title:	S4 - Crescent View Lift Station - Request for ICIP Funding - CC-2022-0256.docx
Attachments:	- ICIP Application.pdf
Final Approval Date:	Nov 21, 2022

This report and all of its attachments were approved and signed as outlined below:

Tracy Wittke

Jim Puffalt

Clive Tolley