

Staff Report for Council Meeting

Date of Meeting: February 8, 2023 Report Number: SRPI.23.026

Department: Planning and Infrastructure

Division: Infrastructure and Engineering Services

Subject: SRPI.23.026 - Response to Budget Committee of

the Whole request to advance the Watermain

Replacement on Cedar Avenue

Purpose:

The purpose of this report is to provide information in response to Budget Committee of the Whole resolution approved on January 24, 2023 regarding the feasibility of advancing the Cedar Avenue Watermain Project

Recommendation(s):

- a) That Staff Report SRPI.23.026 be received for information.
- b) That funding in the amount of \$150,000.00 be made available from the Watermain Repair and Replacement Reserve Fund for 2023 to advance the design for the replacement of the Cedar Avenue Watermain.
- c) That construction funding be added to the 2024 Capital Budget and Forecast as a 2024 construction project.

Contact Person:

Mohammad Kashani P.Eng., Manager, Design and Construction, extension 5479 Bob Levesque P.Eng., Director Infrastructure Delivery, extension 2947

Report Approval:

Submitted by: Paolo Masaro, Executive Director, Infrastructure and Engineering Services, Planning and Infrastructure Department

Approved by: Darlene Joslin, City Manager

All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), City Solicitor (as required), Commissioner, and City Manager. Details of the reports approval are attached.

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Background:

On January 24, 2023 Budget Committee of the Whole passed the following recommendation to advance the delivery of the Watermain Replacement on Cedar Avenue

On January 24, 2023 Budget Committee of the Whole passed the following recommendation related to the delivery of the Cedar Avenue Watermain Replacement Project:

"g) That staff be directed to investigate the feasibility of advancing the Cedar Avenue Watermain Replacement Project with design commencing in 2023 and construction in 2024, funded form the appropriate reserve account, and report back at the February 8th, 2023 meeting of Council"

The following report provides the result of that investigation.

The Planning for the 2023 Capital Budget and Forecast was completed in the summer/fall of 2022

The planning of state of good repair projects for the 2023 Capital Budget and Forecast was completed during the summer and fall of 2022 utilizing the Enterprise Asset Management system. A Watermains age, condition, pipe material, risk of failure, and number of breaks are all factors in determining required interventions.

The existing Cedar Avenue Watermain experienced two additional breaks in December 2022 resulting in extensive damage to a number of residential basements

The existing watermain on Cedar Avenue is a ductile Iron watermain which typically have a lifespan of approximately 80 years. However, ductile iron Watermains are susceptible to corrosion, which will affect its useful life. Ongoing breaks and increased emergency repairs can occur. In December 2022, several watermain breaks occurred on Cedar Avenue resulting in extensive damage to a number of residential basements. Residential properties with reverse grade driveways are susceptible due to the corresponding flooding of the road.

Staff investigated the feasibility of completing the design of this potential project in 2023

A review of the proposed overall 2023 Capital Delivery program, with the intent of adding an additional design project to the program was completed. The Cedar Avenue Watermain Replacement Project can be accommodated into the 2023 program based on program economies of scale, and the utilization of a roster consultant. The scope and cost estimate for the design of the project has been established.

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Financial/Staffing/Other Implications:

Funding in the amount of \$150,000.00 will be made available for the design from the Watermain Repair and Replacement Reserve Fund. Construction funding will be added as part of the 2024 Capital Budget process. There are no immediate staffing or other financial implications associated with this report.

Relationship to Council's Strategic Priorities 2020-2022:

Fiscal Responsibility

Rehabilitating linear infrastructure through a Capital Budget state of good repair process is a fiscally responsible approach to ensuring the City's assets is planned, designed, built and maintained effectively.

Sense of Belonging

Keeping infrastructure in a State of Good Repair and ensuring an appropriate public notification process aids in maintaining a sense of place within the community.

Climate Change Considerations:

Climate change events such as freeze thaw, extreme temperatures and intense rainfall, can impact City operations and asset lifecycles. An increase in extreme weather events can accelerate the deterioration of assets. Advancing the design and replacement of the Cedar Avenue Watermain will make the new watermain more resilient to climate change by using newer watermain pipe material technology and having a new watermain that will be in very good condition with no deterioration.

Conclusion:

This staff report has confirmed that the design of the Cedar Avenue Watermain Replacement project can be completed as part of the 2023 program.

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Report Approval Details

Document Title:	SRPI.23.026 - Response to Budget Committee of the Whole request to advance the Watermain Replacement on Cedar Avenue.docx
Attachments:	
Final Approval Date:	Feb 1, 2023

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

Bob Levesque - Feb 1, 2023 - 10:29 AM

Paolo Masaro - Feb 1, 2023 - 10:40 AM

Kelvin Kwan - Feb 1, 2023 - 1:30 PM

Task assigned to Darlene Joslin was completed by delegate Tracey Steele

Tracey Steele on behalf of Darlene Joslin - Feb 1, 2023 - 2:38 PM