

Report to Council



Date: March 18, 2024
To: Council
From: City Manager
Subject: Budget Amendment - Burtch Sanitary Trunk Lining Project
Department: Utility Services

Recommendation:

THAT Council receives, for information, the report from Utility Services dated March 18, 2024, with respect to a Budget Amendment - Burtch Sanitary Trunk Lining Project;

AND THAT the 2024 Financial Plan be amended to include an additional \$3.45M for the Burtch Sanitary Trunk Lining Project with funding from reserves (Wastewater Utility Accumulated Surplus).

Purpose:

To increase the Burtch Sanitary Trunk Lining Project budget for completion in 2024.

Council Priority Alignment:

Climate & Environment

Background:

In 2018, staff were advised of reinforced concrete pipe deterioration of a trunk sanitary sewer following a video inspection conducted near the intersection of Burtch Street and Sutherland Avenue. In 2019, a consultant helped determine that the deterioration was caused by exposure to elevated hydrogen sulfide (H₂S) levels. The extent of deterioration was investigated throughout a 3.2 km stretch of sewer trunk mainline installed from 1979 to 1983 between Hardy Avenue at Enterprise Way and Burtch Road at Byrns Road.

Since 2020, staff examined several options and scenarios to renew or replace this major trunk line. Traditional forms of replacement along this alignment would prove complex, costly, difficult to complete quickly, and would have a significant impact on the community during construction. The current alignment crosses Highway 97, major roads, Parkinson Park, riparian areas along Mill Creek and major utility crossings. More cost-effective, lower impact solutions were necessary and discussed through three possible trenchless rehabilitation options: Cured In Place Pipe (CIPP), Slip Lining and Pipe Bursting. These

trenchless renewal technologies have not yet been applied in the City, however they are common renewal practices across Canada.

CIPP was selected as the means of rehabilitation, as installation is comparatively quick, easy to phase, and requires little to no excavation. The lining will be resistive to corrosion and will minimize the level of public disruption compared to a full open-trench replacement. The estimated cost of the project used for budgeting in 2022 was \$4.75M and added to the 10 Year Capital Plan.

The project went to tender in fall 2023 scoped for a phased four-year installation. The bids received from contractors exceeded budget estimates. Bidders noted a high element of project risk associated with inflationary pressures, fuel cost fluctuations, costs of annual mobilization of the CIPP technology, and the high costs of being involved with the temporary sewer bypass process every year. The bids were rejected, however a preferred contractor was selected and engaged to recommend efficiencies.

Following the review, the project scope was revised. The new scope involves lining 2.7 km of mainline and installing a 1 km pumped temporary bypass along the old Rail Trail from Hardie Road to the Glenmore Trunk near the Apple Bowl. The bypass pipe will be directionally drilled under Spall Road to reduce traffic impacts. The revised scope results in a project cost of \$7.20M to be spent entirely in 2024. The contractor would be responsible for all work. The remaining 0.5 km of impacted pipe renewal will be addressed as part of the Byrns-Barons Phase 2 DCC project contracts identified in the 10 Year Capital Plan.

Financial/Budgetary Considerations:

The four-year combined budget of \$4.75M noted in the 2022-2032 10-year Capital Plan is not enough to complete the \$7.20M revised budget for the new scope. At present, \$3.75M of budget is already approved from the 2022, 2023 and 2024 Financial Plans. Staff recommend that the 2024 Financial Plan be amended to include an additional \$3.45M funded from the Wastewater Utility Accumulated Surplus reserve fund. Staff will remove the \$1.00M estimate for 2025 from the upcoming 10 Year Capital Plan update.

Conclusion:

The Burtch Sanitary Trunk is a critical element within the City's Wastewater linear conveyance system and requires renewal for at least another 50 years of useful life. The entire project is expected to be completed all at once in 2024, which requires a budget increase of \$3.45M from reserves, and the amendment of the 2024 Financial Plan.

Internal Circulation:

Financial Services
Infrastructure Delivery
Wastewater Utility

Considerations not applicable to this report:

Legal/Statutory Authority:
Legal/Statutory Procedural Requirements:
Existing Policy:

Personnel Implications:
External Agency/Public Comments:
Communications Comments:
Alternate Recommendation:

Submitted by: R. MacLean, Manager Utilities Planning
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Approved for inclusion: M. Logan, General Manager, Infrastructure

Attachments: none

cc: K. Van Vliet, Department Manager, Utilities Services
J. Sass, Divisional Director, Financial Services