

## **Emergency Non-Competitive Contract to Repair a Sanitary Sewer within an Easement Between Ridge Drive and Carstowe Road**

**Date:** January 4, 2023

**To:** General Government Committee

**From:** General Manager, Toronto Water and Acting Chief Procurement Officer

**Wards:** 11

### **SUMMARY**

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The purpose of this report is to advise Toronto City Council, pursuant to Chapter 195 of the Toronto Municipal Code (Purchasing By-Law, Section 195-7.4), of a non-competitive contract with 614128 Ontario Ltd. o/a Trisan Construction. Emergency general contracting and construction services were required to replace a collapsed sewer main by directional drill method within an easement located between Ridge Drive and Carstowe Road in the amount of \$2,095,723 net of all applicable taxes and charges (\$2,132,608 net of HST recoveries).

The issuance of this non-competitive construction contract to replace the failed sewer main was initiated on August 2, 2022, as a matter of extreme urgency due to risks to health and safety, private property, and the environment. The contract was successfully executed and construction of the new sewer main was completed on November 11, 2022.

This repair was deemed as an emergency by the General Manager of Toronto Water, under Chapter 195-7.1 (G) of the Municipal Code. Reporting back to City Council is required in accordance with Municipal Code Chapter 195, Purchasing, Article 7, Section 195-7.4(B) where a non-competitive contract that exceeds \$500,000 was entered into based on an emergency.

### **RECOMMENDATIONS**

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The General Manager, Toronto Water and the Acting Chief Procurement Officer recommends that:

1. City Council receive this report for information.

## FINANCIAL IMPACT

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The total emergency non-competitive contract (Purchase Order Number 6053745) was issued for \$2,095,723 (\$2,132,608 net of HST recoveries) under the emergency provision of the Purchasing By-Law and was funded from the 2022 Approved Capital Budget for Toronto Water by using unused contingencies and savings from other contracts that were available as summarized in Table 1 below:

Table 1: Financial Impact Summary

<b>WBS Element and Description</b>	<b>2022</b>	<b>Total Amount (net of HST recoveries)</b>
CWW465-06-211	\$2,095,723	\$2,132,608

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

## DECISION HISTORY

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This item has not previously been considered by City Council.

## COMMENTS

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On March 24, 2022 Toronto Water received information from several homeowners on Ridge Drive that sewage was backing up into their basements. Staff were immediately mobilized to alleviate any blockages and investigated the cause of the sewer back-up.

It was determined, by close-circuit television investigation, that a section of sewer main located within an easement between Ridge Drive and Carstowe Road had collapsed. The collapse inhibited flow and caused sewage to accumulate inside manholes and resulted in a sewage back up that impacted surrounding properties. A temporary by-pass to re-route the sewage away from the collapsed sewer was installed to stabilize the situation and prevent further impacts.

Figure 1 - Location of Collapsed Sewer Main



On March 31, 2022 Toronto Water, using the "Repairs of Sewer Systems and Appurtenances for Various Locations within the City of Toronto" contract, in accordance with the Request for Tender Ariba Document Number 2602452558, engaged 614128 Ontario Ltd. o/a Trisan Construction ("Trisan Construction") to conduct the work required to repair the collapsed sewer main.

Through the construction planning phase Trisan Construction assessed the site and found that conditions significantly constrained traditional construction methods. These conditions included a steep embankment, mature trees and privately owned permanent structures obstructing access, and limited space for construction staging which would have resulted in blocked or limited vehicle access for the residents, local traffic and emergency vehicles for the duration of the construction work. Due to these constraints typical open cut methods of sewer replacement were not possible and it was determined that the collapsed sewer must be replaced by directional drill method.

Directional drilling is a trenchless method of installing pipe underground along a predetermined path. This option was preferred because it was cost effective, and avoided above ground conflicts (steep embankment, mature trees, and permanent private structures); and minimized disruption to the surrounding community because only two pits were required to facilitate directional drilling.

It was determined that the complexity, scope, and scale of the required construction could no longer be accommodated by the existing contract. For this reason, on August 2, 2022 the existing contract was replaced by an Emergency Non-Competitive contract. In the interest of providing maximum value to the City, expediting construction, and to retain the situational knowledge of this complex site, it was determined that the best course of action was to award the Emergency Non-Competitive contract to Trisan Construction. Under this new contract Trisan Construction was able to proceed with securing the resources necessary to replace the collapsed sewer. Toronto Water ensured the City received the best possible value for the work conducted by negotiating that the new rates aligned with those quoted by Trisan under the competitive procurement process.

Construction progressed in two phases (1) "site preparation" which was well underway before the issuance of the non-competitive contract, and (2) "sewer replacement".

### 1) Site preparation

The following activities were conducted by Trisan Construction as part of their initial site assessment, planning, and site preparation processes and were performed under the original sewer repair contract.

This work included the extensive construction necessary to prepare the site such as: replacement of the temporary bypass hoses with 200 meters of recessed bypass equipment to accommodate local traffic and minimize disruption to the community for the duration of the construction, excavation of two pits for directional drilling, installation of a retaining wall, and bypass of the adjacent watermain.

Figure 2 - Underground Sewer By-Pass System



Figure 3 - Underground Sewer By-Pass System



## 2) Sewer replacement

The following provides details of the work conducted by Trisan Construction to replace the collapsed sewer. This work was done under the Emergency Non-Competitive Contract.

### Replacement of the Collapsed Sewer Main by Directional Drilling (\$552,222.10)

Directional drilling and receiving pits were excavated on Ridge Drive (see Figure 3) and Carstowe Road (see Figure 4), and directional drilling contractor proceeded with drilling and installation of the 300mm HDPE pipe on August 2, 2022. The installation of the pipe was finalized on August 4, 2022.

Figure 4 - HDPE Pipe Set-up on Ridge Dr and Directional Drill Set-Up on Carstowe Rd



### Installation of Maintenance Holes (\$1,089,920.37)

Once directional drilling was complete and the HDPE pipe installed, the contractor proceeded with the installation of the access maintenance holes at both ends of the newly installed pipe. Installation of the 8 meters deep maintenance hole on Ridge Dr and 2 meters deep maintenance hole on Carstowe Rd represented significant effort. The excavation, the work required to ensure site safety, and eventually the work to back fill the excavation were far beyond what is typical to a sewer main replacement project. The maintenance holes were completed on October 12.

Figure 5 - Drilling Pit on Ridge Dr



### Operation & Demobilization of the Sewermain By-pass System (\$262,654.83)

On October 7, 2022, the sewer main on Ridge Dr was reconnected to the newly installed maintenance hole, and the contractor was able to shut down the sewer main by-pass system. The crew proceeded with the dismantling of the buried hoses and the pumps.

Figure 6 - Removal of the Underground Sewer By-Pass System



### Reinstatement of All Services On-Site (\$190,925.47)

On October 19, 2022, contractor commenced reinstatement and disinfection of the by-passed watermain, removal of the watermain by-pass, site clean up and demobilization of all remaining equipment (see Figure 7). On November 11, 2022 the contractor completed the required work.

Figure 7 - Reinstatement of the Work Area



### **Current Status of the Emergency Sewer Repair**

Emergency repairs to the sewer main located on an easement between Ridge Drive and Carstowe Road was completed on November 11, 2022. The final invoice has been processed and the Purchase Order has been closed.

The Fair Wage Office has reported Trisan Construction has reviewed and understands the Fair Wage Policy and Labour Trades requirements. They have also agreed to fully comply.

While each emergency repair has its own unique set of circumstances and challenges Toronto Water staff have noted an increase in the number of instances where emergency sewer work is required, and an increase in the number of complex repairs. It is believed that the City's aging sewer system is the cause of this trend. Toronto Water is addressing this problem on two fronts. First and foremost, by increasing its capital investments in sewer infrastructure replacement and renewal; and secondly by revisiting the scale of repair contracts to better align with the current price and scope of work.

### **CONTACT**

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Antonio Longo, Manager, Distribution and Collection, Toronto Water Telephone: 416-392-4164, Email: [Antonio.Longo@toronto.ca](mailto:Antonio.Longo@toronto.ca)

Marie Reid, Manager, Infrastructure and Development Services, Purchasing Client Services, Purchasing and Materials Management Division Telephone: 416-397-5187, Email: [Marie.Reid@toronto.ca](mailto:Marie.Reid@toronto.ca)

## **SIGNATURE**

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Lou Di Gironimo,  
General Manager, Toronto Water

Tanvir Ahmad for Sandra Lisi  
Acting Chief Procurement Officer, Purchasing & Materials Management