



Report to: General Committee

Meeting Date: May 21, 2019

SUBJECT: Award of Construction Tender 023-T-19 Cast Iron Watermain and Sanitary Sewer Replacement

PREPARED BY: Prathapan Kumar, Senior Manager, Environmental Services, Ext. 2989
Flora Chan, Senior Buyer, Ext. 3189

RECOMMENDATION:

1. THAT the report entitled “Award of Construction Tender 023-T-19 Cast Iron Watermain and Sanitary Sewer Replacement” be received;
2. AND THAT the contract for Tender 023-T-19 Cast Iron Watermain and Sanitary Sewer Replacement be awarded to the lowest priced Bidder, Clearway Construction Inc. in the amount of \$12,387,460.53, inclusive of HST;
3. AND THAT a 7% contingency in the amount of \$867,122.24 inclusive of HST, be established to cover any additional construction costs and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy;
4. AND THAT the construction award in the amount of \$13,254,582.77 (\$12,387,460.53 + \$867,122.24) be funded from the capital project 053-6150-19243-005 “CI Watermain and Sanitary Sewer Replacement” with budget available of \$13,287,150.00;
5. AND THAT the remaining balance of \$32,567.23 (\$13,287,150.00 - \$13,254,582.77) be returned to original funding source;
6. AND THAT a 5-year moratorium be placed on any major servicing and utility installation along restored areas including Valloncliffe Road (Bayview Glen Park to Steeles Avenue East), and Viburnum Place (Daffodil Avenue to Bayview Glenn Park);
7. AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

Not Applicable

PURPOSE:

The purpose of this report is to obtain Council approval to award the contract for the 2019 Cast Iron Watermain and Sanitary Sewer Replacement.

BACKGROUND:Watermain Replacement:

Watermain break records and assessments indicate that the cast iron pipes structural condition is close to the end of its lifecycle and need replacement at Valloncliffe Road, Limcombe Drive, Huckleberry Lane, Lafayette Place, Seinecliffe Road, Old English Lane, Doncrest Drive, Hampshire Court, Carriage Hill Court and McCowan Road (from HWY 7 to Bullock Dr), Heritage Road (from McCowan Road to Laidlaw Blvd). Re-servicing of 8 lots on Church St. and Sir Lancelot Dr is also required. A total of 4,718 metres of existing cast iron watermain have been identified for replacement.

Sanitary Sewer Replacement:

As part of the City-wide Wastewater Master Servicing Plan study, sanitary sewer on Valloncliffe Road/ Old English Lane area have been identified as deficient and require upgrades (890 metres). Since Staff will be replacing the cast iron watermain, it is recommended to coordinate the sanitary sewer upgrade at the Valloncliffe Road/ Old English Lane area to take place at the same time.

Construction Tender

Due to the scope of the project, contractors were prequalified to ensure that they had the necessary qualifications, experience and resources to complete the work in accordance with the City's requirements and within the specified timelines. Prequalification 066-P-17 was issued in accordance with the Purchasing By-law 2017-8.

Pre-Qualification Information (066-P-17)

Prequalification closed on	January 26, 2017
Number of Contractors picking up the Pre-qualification document	34
Number of Contractors responding to the Pre-qualification	16
Number of Contractors Pre-qualified	9

Construction Tender Information (023-T-19)

Bids closed on	April 30, 2019
Number picking up the Bid document	6
Number responding to the Bid	3

Note: Three (3) bidders that were pre-qualified did not pick up the bid document or submit a bid.

Price Summary

Bidder	Bid Price (Incl. of HST)
Clearway Construction Inc.	\$ 12,387,460.53
Lancorp Construction Co Ltd.	\$ 13,225,705.99
KAPP Infrastructure Inc.	\$ 15,729,314.49

OPTIONS/ DISCUSSION:Watermain Replacement

The existing cast iron watermain on Huckleberry Lane, Lafayette Place, Seinecliffe Road, Limcombe Drive, Old English Lane, Carriage Hill Court, Hampshire Court, Doncrest Drive, Valloncliffe Road, McCowan Road (from Hwy 7 to Bullock Dr) and Heritage Road are close

to the end of their life cycle. Combined replacement of services (watermain & sanitary sewer) will minimize disruption to the local community by avoiding replacement of watermains and repair of the roadway at a later date.

The replacement of cast iron watermains is consistent with the City's strategy to upgrade aged and deficient watermains to improve supply capacity and reliability. Replacement of these old cast iron watermains will also offer improved reliability (less risk of breaks) as well as improve water quality and flows for domestic and fire demand. Based on experience, cast iron watermains are susceptible to internal and external corrosion as they age which leads to poor water quality and increased watermain breaks. The new watermain replacement material will be PVC pipe, which has a service life of 90 years and is superior as it is heat resistant, chemical resistant and non-corrosive.

Public Input

A Public Information Committee (PIC) meeting was held on March 6, 2019 to provide an update to the area residents and businesses, as well as to address any potential issues or concerns that the public may have on the proposed construction.

Traffic Management Plan

The objective of the traffic management plan is to limit the traffic within the construction zone (only local traffic will be allowed) and divert through traffic onto adjacent roadways.

Communications Plan

Staff will be providing regular updates to the affected stakeholders as well as providing early notification for any disruptions to driveway access or municipal services. The City's website will also be updated as required to provide up-to-date information on the status of the project.

Construction Moratorium

In early 2018, Environmental Services staff advised all utility companies (e.g. Alectra Utilities Enbridge, Rogers and Bell Canada) that all upgrades to their infrastructure be completed prior to permanent restoration of roads in 2020.

Environmental Services staff is requesting that Council approve a 5-year moratorium on major construction work within the following roadway, which is to be enforced immediately after construction is complete. Minor and emergency repairs would be permitted. The moratorium would not affect any utility projects within the boulevard area.

- Valloncliffe Road (Bayview Glen Park to Steeles Avenue East),
- Viburnum Place (Daffodil Avenue to Bayview Glenn Park)

Project Schedule:

- End of June - Issue of Purchase Order
- Early July 2019 - Commencement of work
- December 20, 2019 - Completion of 70% work to base asphalt
- January to Spring 2020 - Winter Shutdown
- Spring 2020 to Summer 2020 - Complete remaining 30% work, top asphalt, restoration etc.

FINANCIAL CONSIDERATIONS

The following table summarizes the financial considerations for the project:

Budget allocation	\$13,730,800.00	053-6150-19243-005 “CI Watermain and Sanitary Sewer Replacement “
Budget available for this project (A)	\$13,287,150.00	
Less: construction cost (B)	\$12,387,460.53	} Awarded to Clearway Construction Inc. (023-T-19)
Less: contingency (7%) (C)	\$ 867,122.24	
Total cost (D) = (B) + (C)	\$13,254,582.77	
Budget remaining (E) = (A) – (D)	\$ 32,567.23	

The remaining balance of \$32,567.23 will be returned to original funding source.

Operating Budget and Life Cycle Reserve Impact

The constructed sanitary sewer pipes and associated infrastructure is estimated to last 90 years and the PVC watermain service life is estimated to last 90 years. As such, there is no incremental impact to the Life Cycle Reserve Study over the next 25 years. There is no incremental impact to the operating budget.

HUMAN RESOURCES CONSIDERATIONS

Not Applicable.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The proposed watermain and sanitary sewer replacement program is aligned with City’s goal to provide better quality services to the public and is consistent with the Building Markham’s Future Together strategic priority on the “Environment” as it considers sustainability on the built environment.

BUSINESS UNITS CONSULTED AND AFFECTED:

Finance department has been consulted and their comments have been incorporated.

RECOMMENDED BY:

Phoebe Fu
Director of Environmental Services

Brenda Librecz
Commissioner, Community & Fire Services

ATTACHMENTS:

Attachments A, B & C – Location Map