



Report to: General Committee

Date Report: February 5, 2016

SUBJECT: Award of Construction Tender 207-T-15 West Thornhill – Phase 2A Storm Sewer and Watermain Replacement

PREPARED BY: Prathapan Kumar, Senior Manager, ROW Assets, Ext. 2989
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RECOMMENDATIONS:

- 1) THAT the report entitled “Award of Construction Tender 207-T-15 West Thornhill – Phase 2A Storm Sewer and Watermain Replacement” be received;
- 2) AND THAT the contract for Tender 207-T-15 West Thornhill – Phase 2A Storm Sewer and Watermain Replacement be awarded to the lowest priced Bidder, Dagmar Construction Inc., in the amount of \$7,012,054.74, inclusive of HST;
- 3) AND THAT a 10% contingency in the amount of \$701,205.47, 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 \$7,713,260.21 be funded from the following capital projects; 1) 058-6150-16210-005 “West Thornhill Flood Control Construction - Phase 2A” and 2) 053-5350-16246-005 “Watermain Construction and Replacement Program” as outlined under the financial considerations section in this report;
- 5) AND THAT the budget remaining in project #16246 “Watermain Construction and Replacement Program” in the amount of \$29,377.66 will be returned to the original funding source;
- 6) AND THAT a 5-year moratorium be placed on any major servicing and utility installation along restored areas including Grandview Avenue (Elspeth Place to Almond Ave), Brightbay Crescent, Courtham Avenue, Rayneswood Crescent, Pinevale Road and Elspeth Place;
- 7) AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to obtain Council approval to award the contract for the West Thornhill – Phase 2A Storm Sewer and Watermain Replacement.

BACKGROUND:

Stormwater flood control implementation strategy was approved by Council on November 8, 2011 for the West Thornhill area in accordance with the City’s November 2010 Class EA Study. The City-wide Flood Control Program is a 30 year program with an estimated cost of \$234M - \$288M (2014 dollars). The first phase (1A, 1B & 1C) of the remediation includes

storm sewer capacity upgrades in the Bayview Glen neighbourhood and the second phase (2A, 2B, 2C & 2D) includes the Grandview area. Phase 1 and 2 was proposed to be completed in a 5-year period by 2019 as outlined in the table below;

Area	Proposed Implementation Schedule	Status
Phase 1A: Bayview Glen Area	2014 - 2015	Substantially completed as of Dec 2015
Phase 1B: Bayview Glen Area	2015 - 2016	Completion: August 2016
Phase 1C: Canadiana Road	2016	Commencement: May 2016 Completion: Dec 2016
Phase 2A: Grandview Area	2016 - 2017	Commencement: May 2016 Completion: August 2017
Phase 2B: Grandview Area	2017 - 2018	
Phase 2C & 2D: Grandview Area	2018 - 2019	
Phase 3: Clark Ave/Henderson Area	2019 - 2021	
Phase 4: Royal Orchard Area	2021 - 2024	

To support the program, on June 24, 2014, Council approved the structure of the stormwater fee rates in order to meet the annual revenue target for the first 5-year cycle of the Program. The new stormwater fee is a 30-year initiative, to improve storm drainage capacity and limit flooding risks in urban areas.

On June 24, 2014 Council approved a \$47 annual fee per residential property commencing 2015 and on September 28, 2015 Council approved \$29 annual fee per \$100,000 of current value assessment (CVA) for non-residential properties commencing 2016.

Construction of these upgrades provides an opportunity to concurrently replace aged cast iron watermain in these areas and to avoid disturbance of the restored roadway and neighborhood twice.

Construction Tender for Phase 2A

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 279-P-13 was issued in accordance with the Purchasing By-law 2004-341.

Pre-Qualification Information (279-P-13)

Advertised	ETN
Prequalification closed on	October 29, 2013
Number of Contractors picking up the Pre-qualification document	16
Number of Contractors responding to the Pre-qualification	12
Number of Contractors Pre-qualified	6

Construction Tender Information (207-T-15)

Advertised	ETN
Bids closed on	February 4, 2016
Number picking up the Bid document	5
Number responding to the Bid	3*

* Of the three (3) bidders that were pre-qualified but did not submit a bid; all advised that current workload and resources prevented them from bidding.

Price Summary

Bidder	Bid Price (Incl. of HST)
Dagmar Construction Inc.	\$7,012,054.74
Lancorp Construction Co Ltd.	\$8,870,237.35
Memme Excavation Company Ltd.	\$9,328,651.30

OPTIONS/ DISCUSSION:Watermain Replacement

The existing cast iron watermain on Grandview Avenue, Brightbay Crescent, Courtham Avenue, Rayneswood Crescent, Pinevale Road and Elspeth Place are close to the end of their life cycle. Combined replacement of services will minimize disruption to the local community by avoiding replacement of watermain and repair of the roadway at a later date.

The replacement of cast iron watermain is consistent with the City's strategy to upgrade aged and deficient watermain to improve supply capacity and reliability. Replacement of these old cast iron watermain 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 watermain 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 the same lifecycle as cast iron watermain (90 years) and is superior as it is heat resistant, chemical resistant and non-corrosive.

The Tender award includes the replacement of the existing watermain at a cost of \$3,401,926.34 inclusive of 10% contingency and HST impact.

Public Input

A Public Information Committee (PIC) meeting will be held in spring 2016, prior to construction, 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 of

Markham's website will also be updated as required to provide up-to-date information on the status of the project.

Construction Moratorium

In early 2014, Asset Management staff advised all utility companies (e.g. Power Stream, Enbridge, Rogers and Bell Canada) that all upgrades to their infrastructure be completed prior to permanent restoration of roads in 2016.

Asset Management staff are requesting that Council approve a 5-year moratorium on major construction work within the roadway along Grandview Avenue (Elspeth Place to Almond Ave), Brightbay Crescent, Courtham Avenue, Rayneswood Crescent, Pinevale Road and Elspeth Place, which is to be enforced immediately after construction is substantially complete. Minor and emergency repairs would be permitted. The moratorium would not affect any utility projects within the boulevard area.

Project Schedule for Phase 2A:

- April 2016 – Issue of Purchase Order
- May 1, 2016 – Commencement of Work (No through traffic, access to local residents only)
- December 23, 2016– Completion of 70% work to base asphalt
- January to Spring 2016 – Winter Shutdown
- Spring 2017 to Summer 2017 – Complete remaining 30% work, asphalt, restoration etc

FINANCIAL CONSIDERATIONS AND TEMPLATE:

The following table summarizes the financial considerations for Phase 2A:

	Storm	Water	
Budget Available for this Project (A)	\$5,048,347.00	\$3,431,304.00	058-6150-16210-005 West Thornhill Flood Control Construction – Phase 2A 053-5350-16246-005 Watermain Construction and Replacement Program
Less: Construction Cost	\$3,919,394.43	\$3,092,660.31	} Cost of award with HST Impact
Less: Construction Contingency (10%)	\$ 391,939.44	\$ 309,266.03	
Total Construction Cost (B)	\$4,311,333.87	\$3,401,926.34	
Budget Remaining (A – B)	\$ 737,013.13	\$ 29,377.66	*

*The remaining funds in project #16210 “West Thornhill Flood Control Construction - Phase 2A” in the amount \$737,013.13 will not be required from the Stormwater Fee Reserve. The remaining funds in project #16246 “Watermain Construction and Replacement Program” in the amount of \$29,377.66 will be returned to the original funding source.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The proposed flood remediation 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 “Growth Management” and “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:

02/03/2016

3/2/2016

X 

Phoebe Fu
Director, Asset Management

X 

Brenda Librecz
Commissioner, Fire & Community Services

ATTACHMENTS:

Attachment "A" - [\\sharepoint.markham.ca/DavWWWRoot/ert/General Committee\207 T-15 Attachment A Location Map for 2A and 1C.pdf](http://sharepoint.markham.ca/DavWWWRoot/ert/General%20Committee/207-T-15_Attachment%20A_Location%20Map%20for%202A%20and%201C.pdf)

Attachment "B" - [\\sharepoint.markham.ca/DavWWWRoot/ert/General Committee\207-T-15 Attachment B West Thornhill Program Map.pdf](http://sharepoint.markham.ca/DavWWWRoot/ert/General%20Committee/207-T-15_Attachment%20B_West%20Thornhill%20Program%20Map.pdf)