

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 24, 2014

Item 15, Report No. 8, of the Finance, Administration and Audit Committee, which was adopted without amendment by the Council of the City of Vaughan on June 24, 2014.

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**BUDGET AMENDMENT
WATERMAIN RECONSTRUCTION ON CENTRE STREET
FROM DUFFERIN STREET TO BATHURST STREET
WARD 5**

The Finance, Administration and Audit Committee recommends approval of the recommendation contained in the following report of the Commissioner of Engineering and Public Works and the Director of Engineering Services, dated June 16, 2014:

Recommendation

The Commissioner of Engineering and Public Works and the Director of Engineering Services in, consultation with the Commissioner of Finance recommend:

1. That the City's 2014 Capital Budget be amended to include a new capital project for the reconstruction of the existing watermain on Centre Street, between Dufferin Street to Bathurst Street, at an estimated amount of \$3,600,000, inclusive of contingencies, applicable taxes and administration recovery;
2. That the funding source for this project be specified as the water reserve; and
3. That the inclusion of this matter on a Public Committee or Council agenda with respect to amending the capital budget, identified as Budget Amendment Watermain Reconstruction on Centre Street from Dufferin Street to Bathurst Street, is deemed sufficient notice pursuant to Section 2(1)(c) of By-Law 394-2002 as amended.

Contribution to Sustainability

Coordinating the watermain reconstruction on Centre Street, between Dufferin Street to Bathurst Street, with the proposed Bus Rapid Transit has the following advantages:

- **Potential cost savings** – Coordinating multiple projects within one assignment brings forward potential cost saving opportunities that may not be realized if completing the watermain replacement on its own.
- **Impact to local businesses and commuters** – Combining the proposed works into a single construction project will ensure that impacts to the local businesses, as well as commuters, are minimized.

Economic Impact

It is anticipated that there will be an impact of \$3,600,000 to the City's Water Reserve budget as a result of this project.

As it is anticipated that the detailed design and construction of this project will be completed by the York Region Rapid Transit Corporation (YRRTC) in coordination with the design and construction of the H2 - Bus Rapid Transit (BRT), all costs will be confirmed once the YRTTC has awarded the design and construction assignment for the BRT.

Communications Plan

In accordance with the City's notice by-law and due to the time sensitive nature of this project, notice of this amendment to the City's budget is being given by the inclusion of this item on the

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public agenda for the Finance, Administration and Audit Committee, which is posted on the City's Website. Once the contract for project design and construction is awarded, staff will advise the Mayor and Members of Council and will coordinate with the York Region Rapid Transit Corporation to distribute a notice of construction to the affected residents and businesses.

Purpose

To inform Council of the recommendation to amend the City's 2014 Capital Budget.

Background - Analysis and Options

York Region Rapid Transit Corporation is moving forward with the design and construction of the H2 – Bus Rapid Transit

Recently, the York Region Rapid Transit Corporation (YRRTC) approached the City with the opportunity to coordinate any subsurface infrastructure rehabilitation/replacement within the design and construction assignment for the H2 - Bus Rapid Transit (BRT) corridor (See Attachment No. 1). This project will consist of major road infrastructure improvements for Bus Rapid Transit (vivaNext) including, the addition of dedicated bus only lanes, road widening, cycling facilities, pedestrian facilities, streetscaping, utility relocation and corridor revitalization. It is anticipated that the design and construction assignment will be awarded in Q4-2014, with construction commencing in 2015. The Regional Municipality of York has indicated that it is their intention to apply a 5 year moratorium to any works within the corridor following the construction of each BRT link.

Staff have reviewed all City owned infrastructure within the proposed limits of the H2 - BRT project

Staff have reviewed the existing underground infrastructure within the BRT limits of construction. There is an existing 300mm cast iron watermain along Centre Street, between Dufferin Street to Bathurst Street. The watermain limits are shown in Attachment No. 2. The exact construction date is unknown, however, records indicate that the watermain was constructed in the early 1970's. Over the past 40 years, five watermain breaks have been repaired within these limits. Traditionally, it is expected that maintenance costs increase with cast iron watermain of this vintage. Although the projected service life of metallic watermain is 50 years, it is expected that the frequency of watermain breaks will significantly increase beyond 30 years of life.

Staff recommend reconstructing this watermain in conjunction with the YRRTC BRT project

Coordinating major works such as these has the potential to realize a savings in construction costs as well as a reduced impact to the citizens, commuting traffic and the local businesses.

By incorporating the watermain reconstruction into the YRRTC BRT project, the City will not be required to carry out restoration of the roadway and boulevard that would traditionally be impacted during the course of standalone watermain construction. Furthermore, by undertaking the watermain reconstruction at the end of its service life, construction costs will increase significantly as a result of the upgrades to the roadway and boulevard streetscaping features, as well as new infrastructure and street furniture that are planned as part of the BRT project.

Although the watermain has not realized its expected asset life, reconstructing the main at this time will also reduce the risk of watermain breaks and decrease overall operating costs. Reducing the risk of failure of this watermain will minimize the impact to the operations of the BRT.

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The estimated cost of \$3,600,000 to reconstruct the watermain includes, but is not limited to, design, construction and contingency allowance. As a result of the subsurface works proposed, the project is considered to be moderate in complexity with a mostly defined scope with some uncertainties. In accordance with the Contingency Matrix (identified in Appendix 1 of the Capital Project Financial Administration and Reporting Policy), a contingency allowance of 15% has been identified as an appropriate amount to address any unforeseen work in completing the scope of this project.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in enhancing and maintaining community safety, health and wellness by ensuring that drinking water standards are maintained for the local residents.

Regional Implications

The Regional Municipality of York will be notified of this capital program amendment and be requested to carry out the design and construction on behalf of the City.

Conclusion

Staff recommends that a project for the watermain reconstruction on Centre Street, between Dufferin Street to Bathurst Street in the amount of \$3,600,000, be added to the City's 2014 Capital Budget, in order to allow YRTCC to procure external contracted resources, and to complete the design and construction of this project in conjunction with the H2 - Bus Rapid Transit design and construction contract.

Attachments

1. VIVAnext Scope of work
2. Centre Street Watermain - Location Map

Report prepared by:

Vince Musacchio, P. Eng., PMP, Manager of Capital Planning and Infrastructure, ext. 8311

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

FINANCE, ADMINISTRATION AND AUDIT COMMITTEE - JUNE 16, 2014

BUDGET AMENDMENT WATERMAIN RECONSTRUCTION ON CENTRE STREET FROM DUFFERIN STREET TO BATHURST STREET WARD 5

Recommendation

The Commissioner of Engineering and Public Works and the Director of Engineering Services in, consultation with the Commissioner of Finance recommend:

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Economic Impact

It is anticipated that there will be an impact of \$3,600,000 to the City's Water Reserve budget as a result of this project.

As it is anticipated that the detailed design and construction of this project will be completed by the York Region Rapid Transit Corporation (YRRTC) in coordination with the design and construction of the H2 - Bus Rapid Transit (BRT), all costs will be confirmed once the YRTTC has awarded the design and construction assignment for the BRT.

Communications Plan

In accordance with the City's notice by-law and due to the time sensitive nature of this project, notice of this amendment to the City's budget is being given by the inclusion of this item on the public agenda for the Finance, Administration and Audit Committee, which is posted on the City's Website. Once the contract for project design and construction is awarded, staff will advise the Mayor and Members of Council and will coordinate with the York Region Rapid Transit Corporation to distribute a notice of construction to the affected residents and businesses.

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The estimated cost of \$3,600,000 to reconstruct the watermain includes, but is not limited to, design, construction and contingency allowance. As a result of the subsurface works proposed, the project is considered to be moderate in complexity with a mostly defined scope with some uncertainties. In accordance with the Contingency Matrix (identified in Appendix 1 of the Capital Project Financial Administration and Reporting Policy), a contingency allowance of 15% has been identified as an appropriate amount to address any unforeseen work in completing the scope of this project.

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Report prepared by:

Vince Musacchio, P. Eng., PMP, Manager of Capital Planning and Infrastructure, ext. 8311

Respectfully submitted,

Paul Jankowski, P. Eng.
Commissioner of Engineering and Public Works
PM:mc

Jack Graziosi, P. Eng.
Director of Engineering Services

ATTACHMENT No. 1



VIVAnext SCOPE OF WORK

LEGEND

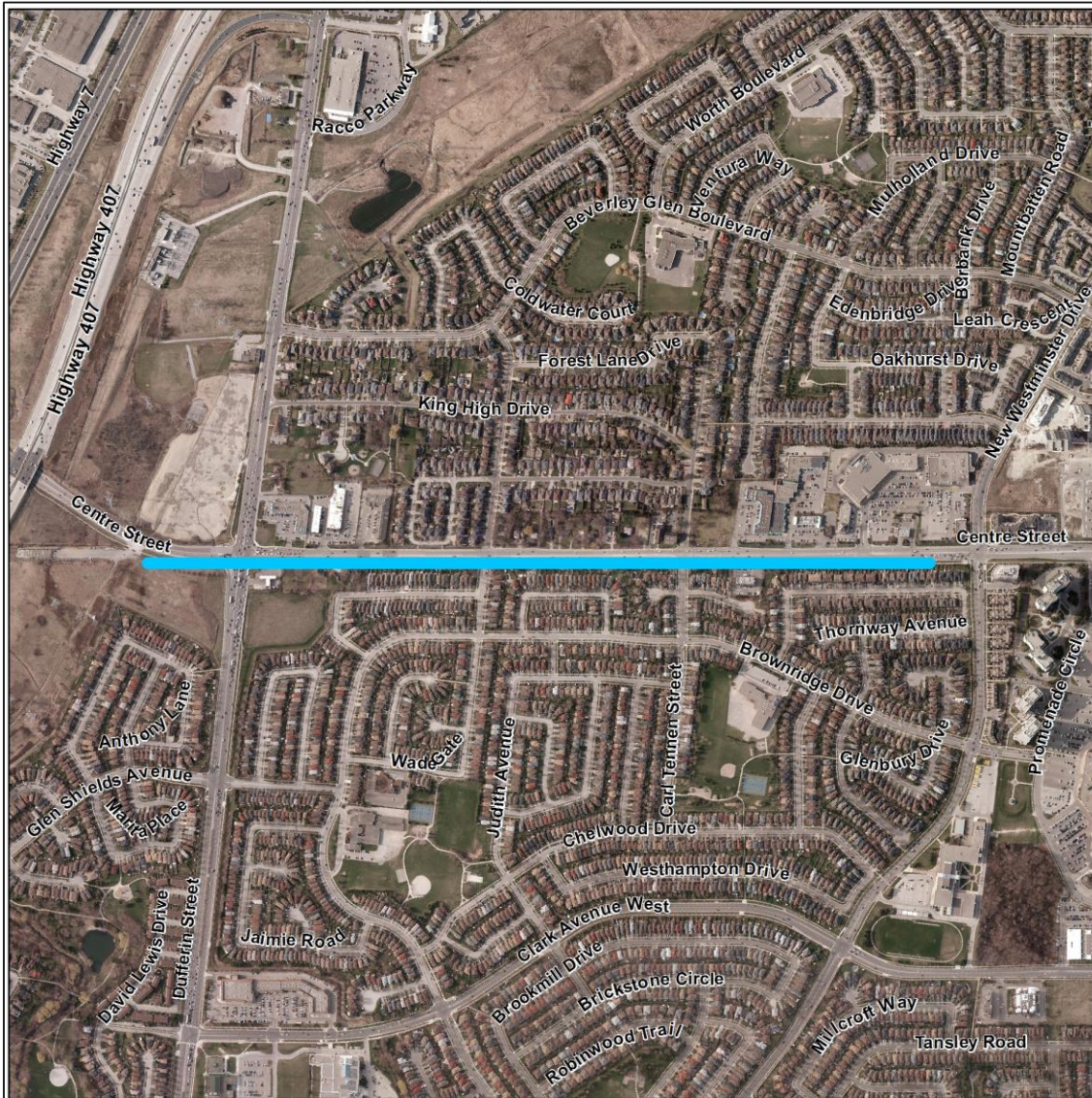
 VIVAnext ROUTE

Note: Aerial photography acquired in spring, 2013



NOT TO SCALE

ATTACHMENT No. 2



CENTRE STREET WATERMAIN

LEGEND

 Cast Iron Watermain

Note: Aerial photography acquired in spring, 2013

