

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JANUARY 19, 2016

Item 1, Report No. 1, of the Finance, Administration and Audit Committee, which was adopted without amendment by the Council of the City of Vaughan on January 19, 2016.

**1 CONTRACT AMENDMENT FOR TENDER T14-390 AND BUDGET AMENDMENT CAPITAL
PROJECT EN-1943-13
WATERMAIN REPLACEMENT AND ROAD REHABILITATION OF NEW WESTMINSTER DRIVE
WARD 5**

The Finance, Administration and Audit Committee recommends approval of the recommendation contained in the following report of the Deputy City Manager of Public Works and the Director of Infrastructure Delivery, dated January 11, 2016:

Recommendation

The Deputy City Manager of Public Works and the Director of Infrastructure Delivery, in consultation with the Director of Purchasing Services and Director of Financial Planning and Development Finance & Deputy City Treasurer, recommend:

1. That the scope of work be revised to increase the utilization of Pay Duty officers and the required activities to remedy saturated subgrade conditions;
2. That the contract amount for Tender T14-390 for watermain replacement and road rehabilitation on New Westminster Drive from Steeles Avenue to Mullen Drive/Joseph Aaron Boulevard be increased by \$60,000.00, to a total value of \$934,294.00, plus applicable taxes, to address the increases in construction costs;
3. That the amount identified in the above recommendation plus applicable taxes and administration recovery be funded from Capital Project EN-1943-13 2014 Road Rehabilitation and Watermain Replacement - Phase 2 and the following budget amendment with an overall increase of \$62,788.00 be approved:
 - a. \$43,088.00 be transferred from Capital Project EN-1872-13 to EN-1943-13
 - b. \$19,800.00 be transferred from Capital Project EN-1873-13 to EN-1943-13;
4. That the inclusion of this matter on a Public Committee or Council agenda with respect to amending the capital budget identified as Contract Amendment of Tender T14-390 and Budget Amendment is deemed sufficient notice pursuant to Section 2(1)(c) of By-Law 394-2002; and
5. That the Mayor and City Clerk be authorized to sign the appropriate documents.

Contribution to Sustainability

An integral part of a sustainable city is effective asset management. Through infrastructure investments, the risk of failure is reduced and system reliability improved, providing optimal service to residents. The watermain replacement and road rehabilitation on New Westminster Drive will maximize the return on the City's capital and operating investments and ensure that acceptable levels of service are maintained for the health and well-being of its citizens.

This project was the first major road project undertaken by the City specifying the use of warm mix asphalt. This asphalt mix uses less energy at the production plant, reducing carbon emissions, and can accommodate an increased percentage of recycled construction materials in

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the asphalt mix design. This is consistent with Green Directions Vaughan Goal #1: To significantly reduce our use of natural resources and the amount of waste we generate, in particular Objective 1.1. To reduce greenhouse gas emissions and move towards carbon neutrality for the City of Vaughan's facilities and infrastructure.

Economic Impact

Tender T14-390 for the watermain replacement and road rehabilitation of New Westminster Drive was awarded on January 13, 2015, in the amount of \$874,294.00 (excluding taxes)

On January 13, 2015, City Council awarded Tender T14-390 (Report No. 2, Item 5) for the watermain replacement and road rehabilitation of New Westminster Drive to 614128 Ontario Ltd. O/A Trisan Construction. The total value of the assignment, excluding H.S.T., was \$874,294.00 that included a contingency allowance of \$80,000.00.

Additional contract costs of \$140,000.00 were incurred during construction to address some minor and major construction activities. Approximately \$67,000.00 of these costs were related to unforeseen saturated subgrade conditions and increased utilization of Pay Duty officers. The balance of the work undertaken were minor activities to address constructability, traffic safety and pedestrian/vehicular accessibility issues. After utilizing the approved contingency allowance of \$80,000.00 for these additional construction activities, an additional award amendment of \$60,000.00 is required. As a result of the recommended increase the total value of the assignment will be increased to \$934,294.00, including contingency allowance, plus applicable taxes. Additional information regarding this work can be found in the Background-Analysis and Options section of this report.

Sufficient funds for the additional construction activities are not available within Capital Project EN-1943-13 and as such, a budget amendment increasing Capital Project EN-1943-13 by \$62,888.00 is required. Capital Projects EN-1872-13, 2013 Pavement Management Program - Phase 2 and EN-1873-13, 2013 Pavement Management Program - Phase 3 are complete with remaining funds of \$43,088.00 and \$23,836.00 respectively. As such, there is no additional economic impact as the roads component can be funded from the budgets remaining in Capital Projects EN-1872-13 and EN-1873-13 (2013 Pavement Management Program Phases 2 and 3).

Communications Plan

Not Applicable.

Purpose

To obtain Council approval for a contract amendment for Tender T14-390 for watermain replacement and road rehabilitation on New Westminster Drive and to amend the associated capital budget.

Background - Analysis and Options

614128 Ontario Ltd. O/A Trisan Construction was awarded Tender T14-390 to undertake the watermain replacement and road rehabilitation on New Westminster Drive

Construction activities on New Westminster Drive commenced the week of March 30, 2015 with the installation of the new watermain, from Steeles Avenue to Conley Street. Once the new watermain was commissioned, concrete curb and sidewalk repairs were undertaken, followed by the road resurfacing, from Steeles Avenue to Mullen Drive/Joseph Aaron Boulevard.

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The project was substantially completed the week of July 6, 2015, within the allotted working days set out in the contract documents.

A contract amendment is required to address additional construction activities that have depleted the approved contingency

Additional construction activities were required during the project to address various unforeseen issues. These activities included addressing unforeseen subgrade conditions and the unplanned utilization of Pay Duty officers from York Regional Police. Other minor construction activities included addressing constructability issues, additional traffic safety activities, and delays caused by inoperable water valves. The minor construction activities have been managed within the approved contingency. The other activities will deplete the remainder of the approved contingency and require additional funding.

Saturated subgrade conditions resulted in additional sidewalk construction costs

As part of the concrete sidewalk repairs, a 320m section of bicycle/pedestrian path was reconstructed. During removal, it was discovered that the subgrade was saturated beyond what is prescribed within City specifications, that negatively impacted the contractor's ability to complete this work. In consultation with the City's geotechnical consultant, an economical and technically feasible solution was developed that included the installation of a geotextile fabric and the placement of new granular material.

Geotechnical investigations were undertaken during the detailed design of the project, however, this section of bicycle/pedestrian path was not included as it did not exhibit any signs of poor subsurface ground conditions. As a result, the remedial work completed is considered additional work to the contract, that resulted in costs of approximately \$28,000.00.

Unplanned utilization of Pay Duty officers also resulted in additional construction costs

Pay Duty services were specified within the contract for the construction activities at the New Westminster Drive and Steeles Avenue West intersection. A Pay Duty officer is not typically needed for construction on local roads within the City. However, for health and safety reasons, it was determined that the Crossing Guards would not be able to perform their duties when construction activities directly affected their work environment.

Provisions did exist within the contract for the general contractor to provide flag/traffic control persons, when required, but citizen inquiries were received expressing concerns that the contractors' flagman/traffic control persons did not have a "Police Vulnerable Sector Check". As a result, additional Pay Duty officers were required at both the Conley Street and Mullen Drive/Joseph Aaron Boulevard intersections during construction to ensure safe passage of children, in the absence of the Crossing Guard.

The invoices for the use of Pay Duty officers identified that the rates and process for the use of Pay Duty Officers from York Regional Police had changed. The additional usage as well as the rate increase of Pay Duty services resulted in an overall increase of \$39,000.00 to the cost to the project, as compared to what was estimated at the time of detailed design.

A Budget Amendment is required in Capital Project No. EN-1943-13

Two separate projects have been funded from Capital Project EN-1943-13, namely New Westminster Drive (Tender T14-390 awarded January 20, 2015) as well as Crestwood Road (Tender T14-389 awarded March 24, 2015). At the time of awarding Tender T14-389, sufficient funds were not available in Capital Project EN-1943-13, and the funding shortfall in order to award the tender was addressed by transferring funds from Capital Projects EN-1868-12 and EN-1870-12.

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In order to proceed with the request for the Contract Amendment of Tender T14-390, a Budget Amendment of \$60,000.00, plus applicable charges and taxes, is being requested for Capital Project EN-1943-13, to be funded by transferring funds from Capital Project EN-1723-08.

The economic impact of the additional contract costs is summarized in the table below:

TABLE 1 - ADDITIONAL CONTRACT COSTS	
\$	
Additional Contract Costs (T14-390)	60,000.00
H.S.T. (1.76%) Not Recoverable	1,056.00
Sub-Total	61,056.00
Administration Recovery (3%)	1,832.00
Net Additional Contract Costs	62,888.00

TABLE 2: PROJECT FUNDING POSITION SUMMARY					
	EN-1943-13			EN-1872-13	EN-1873-13
	Watermain	Roads	Total	Roads	Roads
Approved Budget with Prior Amendments	2,148,198	1,589,368	3,737,566	3,218,750	3,321,750
Expenses/Commitments to Date	(2,148,198)	(1,589,368)	(3,737,566)	(3,175,662)	(3,297,914)
Current Funds Remaining	0	0	0	43,088	23,836
Additional Contract Costs T14-389	0	(62,888)	(62,888)	0	0
Amount Exceeding Capital Project Budget	0	(62,888)	(62,888)	43,088	23,836
Funding Adjustments					
Transfer from EN-1872-13		43,088	43,088	(43,088)	0
Transfer from EN-1873-13		19,800	19,800		(19,800)
Total Funding Adjustments	0	62,888	62,888	(43,088)	(19,800)
Balance Remaining	0	0	0	0	4,036

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

In consideration of the Term of Council Priorities, the recommendations of the report supports the priority to invest, renew and manage infrastructure and assets by ensuring that the drinking water quality standards and roadway conditions are maintained for the residents of the City of Vaughan.

Regional Implications

Not Applicable.

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Conclusion

The additional funds requested are required to pay 614128 Ontario Ltd. O/A Trisan Construction for work completed under Tender T14-390, Watermain Replacement and Road Rehabilitation on New Westminster Drive from Steeles Avenue to Mullen Drive/Joseph Aaron Boulevard. The time and costs associated with the additional work have been verified by staff. It is therefore appropriate to approve the increase in award as requested.

Attachments

N/A

Report prepared by:

Frank Facchini, Project Manager, Design & Construction (East) Ext. 8986
Paolo Masaro, Manager, Design & Construction (East) Ext. 8446

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Attachments

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Report prepared by:

Frank Facchini, Project Manager, Design & Construction (East) Ext. 8986
Paolo Masaro, Manager, Design & Construction (East) Ext. 8446

Respectfully submitted,

Paul Jankowski,
Deputy City Manager, Public Works

Jack Graziosi,
Director of Infrastructure Delivery

FF:cg