EXTRACT FROM COUNCIL MEETING MINUTES OF MARCH 24. 2015

Item 6, Report No. 7, of the Finance, Administration and Audit Committee, which was adopted without amendment by the Council of the City of Vaughan on March 24, 2015.

6 AWARD OF TENDER T14-389 AND BUDGET AMENDMENT CRESTWOOD ROAD WATERMAIN REPLACEMENT AND ROAD REHABILITATION WARD 5

The Finance, Administration and Audit Committee recommends approval of the recommendation contained in the following report of the Commissioner of Public Works and the Director of Capital Delivery and Asset Management, dated March 9, 2015:

Recommendation

The Commissioner of Public Works and the Director of Capital Delivery and Asset Management, in consultation with the Director of Purchasing Services and the Director of Financial Planning and Analytics, recommend:

- That Tender T14-389, Crestwood Road Watermain Replacement and Road Rehabilitation be awarded to Tedescon Infrastructure Ltd., in the amount of \$2,353,310.00 plus applicable taxes:
- 2. That a contingency allowance in the amount of \$235,000.00, plus applicable taxes be approved within which the Commissioner of Public Works or his designate is authorized to approve amendments to the contract;
- 3. That a Geotechnical and Material Testing amount of \$40,000.00, plus applicable taxes be approved to ensure compliance with all applicable standards;
- 4. That the amounts identified in the above recommendations illustrated within this report, including all contingency allowances, applicable taxes and administration recovery be funded from Capital Project EN-1943-13 and the following budget amendments resulting in an overall increase of \$444,655.60 be approved:
 - a. \$602,486.92 be transferred from Capital Project EN-1868-12 to EN-1943-13;
 - b. \$97,795.99 be transferred from Capital Project EN-1870-12 to EN-1943-13;
 - c. Water Reserve Funding be reduced by \$255,627.31;
- 5. That the inclusion of this matter on a Public Committee or Council agenda with respect to amending the capital budget identified as Award of Tender T14-389 and Budget Amendment be deemed as sufficient notice pursuant to Section 2(1)(c) of By-Law 394-2002; and
- 6. 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 proposed watermain replacement and road rehabilitation will maximize the return on the City's capital and operating investments and ensure that an acceptable level of service is maintained for the health and well-being of its citizens.

This project specifies the use of warm mix asphalt. This type of asphalt uses less energy during production, reducing carbon emissions, and can also accommodate an increased percentage of

EXTRACT FROM COUNCIL MEETING MINUTES OF MARCH 24. 2015

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recycled construction materials within the 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

The total project cost of \$2,754,805.31 is available within Capital Project EN-1943-13 with the recommended budget amendment. Capital Project EN-1868-12, 2012 Pavement Management Program - Phase 1 is complete and has remaining funds of \$602,486.92. Capital Project EN-1870-12, 2012 Pavement Management Program - Phase 3 is also complete and has remaining funds of \$168,208.57. Upon approval of this report, and transfer of \$608,486.92 and \$97,795.99 from Capital Projects EN-1868-12 and EN-1870-12 (respectively), to EN-1943-13, Capital Projects EN-1868-12 and EN-1870-12 will be closed. A detailed explanation of the funding is provided in the

Background - Analysis and Options section of this report.

As illustrated in Table 2, the actual tender costs received have resulted in the watermain costs to be \$255,627.31 less than the estimated budget, and the roads component being \$700,282.91 higher than the budget. The budget amendment will result in a net increase to capital project EN-1943-13 of \$444,655.60. There is no additional economic impact as the roads component can be funded from the budgets remaining in Capital Projects EN-1868-12 and EN-1870-12, (2012 Pavement Management Program Phases 1 and 3), since project EN-1943-13 has the same funding source (Debenture Financing).

Communications Plan

Once the project is awarded, staff will advise the Mayor and Members of Council and will distribute a newsletter to the affected residents.

Purpose

Council approval to award Tender T14-389, Crestwood Road Watermain Replacement and Road Rehabilitation and amend the associated capital budget.

Background - Analysis and Options

The Watermain Replacement and Road Rehabilitation on Crestwood Road was approved as part of the 2013 Capital Budget, and was first tendered as part of T14-029 jointly with New Westminster Drive

The Crestwood Road project was originally tendered along with New Westminster Drive as part of T14-029, which closed on July 21, 2014. Two compliant bids were received at that time, and the lowest bid exceeded the available budget.

Crestwood Road was identified in the City's Pavement Management Program (PMP) requiring resurfacing/rehabilitation. During the planning and programming of capital works projects, assumptions based on visual inspection and experience from past projects are used as tools to determine scope and set the budget accordingly. Upon budget approval, preliminary design activities, including geotechnical investigations are undertaken to verify scope. In the case of Crestwood Road, the existing pavement structure required full depth asphalt replacement, rather than the partial depth which staff had estimated. As Crestwood Road extends over 2km in length, the increase in asphalt quantities resulted in a substantial increase in costs, which was suspected as the primary reason for the budget shortfall. Staff were also of the opinion that tendering late in the season was a contributory factor to the low number of competitive bids received.

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Tender T14-029 for Crestwood Road and New Westminster Drive was cancelled and new tenders separately issued for the 2015 construction season

Since Tender T14-029 closed during the 2014 Summer Hiatus period, and the lowest bid exceeded the available funding, a request to increase the budget could not occur until Council resumed in September. Awarding a large project at that time would have impacted the construction schedule by not providing sufficient time to complete the work within the 2014 construction season. In addition to prolonged disruption to citizens within the community, a further increase in project costs could be expected as a result of winter work.

As a result, staff requested that the tender be cancelled and reissued as two separate contracts late in 2014, when an increase in bidder competition could be expected, and potentially lower bid prices (at the commencement of the 2015 construction season). The New Westminster Drive portion of the project was awarded by Council on January 20, 2015, as part of Tender T14-390.

On December 11, 2014, bids were received for T14-389, Crestwood Road Watermain Replacement and Road Rehabilitation

The scope of work, as part of this contract, includes the replacement of ductile iron watermains and road rehabilitation on Crestwood Road. (See Attachment No. 1 for project locations and limits). The tender was advertised in the Daily Commercial News, the City Webpage, the Ontario Public Buyers Association (OPBA) and on Biddingo on November 26, 2014 and closed on December 11 2014. A total of 8 compliant bids were received:

| Contractor | Total Bid Amount (excl. H.S.T.) |
|--|--|
| Tedescon Infrastructure Ltd. Direct Underground Inc. Lakeside Contracting Co. Limited Four Seasons Site Development Ltd. Trisan Construction Sam Rabito Construction Ltd. Fermar Paving Ltd. | \$2,353,310.00 \$2,432,230.00 \$2,445,950.00 \$2,640,170.00 \$2,796,034.50 \$3,224,075.00 * \$3,318,676.50 |
| King Cross Contracting Limited | \$4,105,843.00 |

^{*} Corrected for arithmetic error

The total estimated cost for the construction of this project is \$2,755,000.00 and is calculated as follows:

| TABLE 1: ESTIMATED CONSTRUCTION COSTS | | | | |
|--|--------------|------------|--------------|--|
| | Watermain | Roads | Total | |
| | \$ | \$ | \$ | |
| Tedescon Infrastructure Ltd. Bid Price | 1,547,240.00 | 806,070.00 | 2,353,310.00 | |
| (Excluding H.S.T.) | | | | |
| Contingency Allowance (Approx. 10%) | 155,000.00 | 80,000.00 | 235,000.00 | |
| Geotechnical Allowance and Material Testing (Est.) | 20,000.00 | 20,000.00 | 40,000.00 | |
| Sub-Total | 1,722,240.00 | 906,070.00 | 2,628,310.00 | |
| H.S.T. (1.76%) Not Recoverable | 30,311.42 | 15,946.83 | 46,258.25 | |
| Total | 1,752,551.42 | 922,016.83 | 2,674,568.25 | |
| Administration (3%) | 52,576.54 | 27,660.50 | 80,237.04 | |
| Net Total Cost | 1,805,127.96 | 949,677.33 | 2,754,805.29 | |

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| TABLE 2: PROJECT FUNDING POSITION SUMMARY | | | | | |
|--|--|--|--|---|---|
| Approved Budget | Watermain \$ 2,403,825.00 | EN-1943-13 Roads \$ 889,085.00 | Total \$ 3,292,910.00 | EN-1868-12 Roads \$ 2,686,000.00 | EN-1870-12 Roads \$ 3,349,600.00 |
| Expenses/Commitments to Date Current Funds Remaining Net Total Cost (T14-389) | (343,069.72) 2,060,755.28 (1,805,127.97) | (639,690.57) 249,394.43 (949,677.34) | (982,760.29) 2,310,149.71 (2,754,805.30) | (2,083,513.08) 602,486.92 0.00 | (3,181,391.43) 168,208.57 0.00 |
| (Amount Exceeding) Capital Project Budget | 256,627.31 | (700,282.91) | (444,655.59) | 602,486.92 | 168,208.57 |
| Funding Adjustments Transfer from EN-1868-12 Transfer from EN-1869-12 Reduction in Water Reserve Funding | (256,627.31) | 602,486.92 97,795.99 | 602,486.92 97,795.99 (256,627.31) | (602,486.92) | (97,795.99) |
| Total Funding Adjustments | (256,627.31) | 700,282.91 | 444,655.60 | (602,486.92) | (97,795.99) |
| Balance Remaining | 0.00 | 0.00 | 0.00 | 0.00 | 70,412.58 |

The project is not considered to be high in complexity and is of moderate duration, with a well-defined scope. In accordance with the Contingency Matrix (identified in Appendix 1 of the Capital Project Finance Administration and Reporting Policy), a contingency allowance of 10% has been identified as an appropriate amount to address any unforeseen work in completing the scope of this project.

Any residual funds will be transferred back to the original funding sources upon completion of the project.

Based on the review of the bids by staff, it is appropriate to award T14-389, Crestwood Road Watermain Replacement and Road Rehabilitation, to the lowest compliant bidder, Tedescon Infrastructure Ltd.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of the report will assist in enhancing and maintaining community safety, health and wellness by ensuring that an appropriate level of service for the roadway conditions are maintained for the citizens of Vaughan. The replacement of the existing watermain will ensure that drinking water quality standards and infrastructure are maintained for the residents of the City of Vaughan.

Regional Implications

The scope of the project includes watermain replacement and road rehabilitation on Crestwood Road, which encroaches onto the rights-of-way of Bathurst Street and Yonge Street, which are both owned and operated by the Regional Municipality of York. The Regional Municipality of York has granted their approval for the project, and will be included in the Communication Plan.

Conclusion

Staff recommends that this contract be awarded to Tedescon Infrastructure Ltd., in the amount of \$2,353,310.00, plus applicable taxes. With the recommended budget amendments outlined in this report, sufficient funding is available in the Capital Project EN-1943-13 to complete this project.

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Attachment

1. Location Map

Report prepared by:

Colin Cassar, C.E.T., Senior Engineering Assistant, ext. 8756 Paolo Masaro, P. Eng., Manager, Design and Construction, ext. 8446

(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 - MARCH 9, 2015

AWARD OF TENDER T14-389 AND BUDGET AMENDMENT CRESTWOOD ROAD WATERMAIN REPLACEMENT AND ROAD REHABILITATION WARD 5

Recommendation

The Commissioner of Public Works and the Director of Capital Delivery and Asset Management, in consultation with the Director of Purchasing Services and the Director of Financial Planning and Analytics, recommend:

- 1. That Tender T14-389, Crestwood Road Watermain Replacement and Road Rehabilitation be awarded to Tedescon Infrastructure Ltd., in the amount of \$2,353,310.00 plus applicable taxes;
- 2. That a contingency allowance in the amount of \$235,000.00, plus applicable taxes be approved within which the Commissioner of Public Works or his designate is authorized to approve amendments to the contract;
- 3. That a Geotechnical and Material Testing amount of \$40,000.00, plus applicable taxes be approved to ensure compliance with all applicable standards;
- 4. That the amounts identified in the above recommendations illustrated within this report, including all contingency allowances, applicable taxes and administration recovery be funded from Capital Project EN-1943-13 and the following budget amendments resulting in an overall increase of \$444,655.60 be approved:
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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 proposed watermain replacement and road rehabilitation will maximize the return on the City's capital and operating investments and ensure that an acceptable level of service is maintained for the health and well-being of its citizens.

This project specifies the use of warm mix asphalt. This type of asphalt uses less energy during production, reducing carbon emissions, and can also accommodate an increased percentage of recycled construction materials within the 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

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Purpose

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| (Excluding H.S.T.) | | | | |
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ROUNDED \$2,755,000.00

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| | | EN-1943-13 | | EN-1868-12 | EN-1870-12 |
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| Funding Adjustments | | | | | |
| Transfer from EN-1868-12 | | 602,486.92 | 602,486.92 | (602,486.92) | |
| Transfer from EN-1869-12 | | 97,795.99 | 97,795.99 | | (97,795.99) |
| Reduction in Water Reserve Funding | (256,627.31) | | (256,627.31) | | |
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Regional Implications

The scope of the project includes watermain replacement and road rehabilitation on Crestwood Road, which encroaches onto the rights-of-way of Bathurst Street and Yonge Street, which are both owned and operated by the Regional Municipality of York. The Regional Municipality of York has granted their approval for the project, and will be included in the Communication Plan.

Conclusion

Staff recommends that this contract be awarded to Tedescon Infrastructure Ltd., in the amount of \$2,353,310.00, plus applicable taxes. With the recommended budget amendments outlined in this report, sufficient funding is available in the Capital Project EN-1943-13 to complete this project.

Attachment

1. Location Map

Report prepared by:

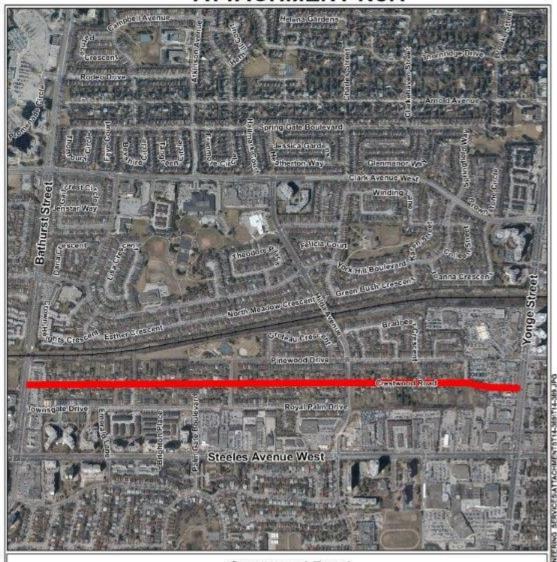
Colin Cassar, C.E.T., Senior Engineering Assistant, ext. 8756 Paolo Masaro, P. Eng., Manager, Design and Construction, ext. 8446

Respectfully submitted,

Paul Jankowski Commissioner of Public Works Jack Graziosi Director of Capital Delivery and Asset Management

CC:mc

ATTACHMENT No.1



<u>Crestwood Road</u> <u>Watermain Replacement and Road Rehabilitation</u> <u>T14-389</u>

LEGEND

Subject Road

Note: Aerial photography acquired in spring, 2014

T TO SCALE