

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON APRIL 11, 2017
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	CONTRACT PRICE INCREASE: TENDER T16-21 INFRASTRUCTURE RENEWAL PROGRAM CONTRACT 4 - MCCORMICK AREA RECONSTRUCTION

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the McCormick Area Reconstruction works:

- a) the McCormick Area Reconstruction (Tender T16-21) contract value with Bre-Ex Limited **BE INCREASED** by \$310,000 to \$3,385,067.28 excluding HST in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy; and
- b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";
- c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- d) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus areas of *Building a Sustainable City and Leading in Public Service directly and indirectly as follows*: Addressing the infrastructure gap, building robust infrastructure, enhancing safety for all road users in the city, and managing and improving our water, wastewater and stormwater infrastructure and services. Renew London 2016 was committed to delivering excellent customer service and providing great customer experiences to residents, business and visitors by communicating projects in advance and coordinating all work to help build and deliver efficient infrastructure and minimize delays and inconveniences to the public during construction.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

CWC – APRIL 12, 2016 – Contract Award: Tender No. 16-21 2016 Infrastructure Renewal Program Contract 4 – McCormick Area Reconstruction

BACKGROUND

Purpose

The City's Procurement of Goods and Services Policy requires Council approval for amendments to contracts in excess of \$50,000 or 3% of the contract value, whichever is greater. The McCormick Area Reconstruction contract requires an amendment due to an unforeseen underground obstruction below the Canadian Pacific Railway ("CPR") Right-of-Way at the north end of McCormick Boulevard (south of McCormick Park).

Context

In general, the change in scope consists of the following key items:

- Additional labour
- Standby costs during CPR approval
- Equipment rental and usage
- Additional material

DISCUSSION

The following subsections provide further insight into the unforeseen conditions encountered on site, and the subsequent additional work and cost required.

Background and Scope of Work Subject to Additional Costs

As part of the McCormick Area Reconstruction project the Contractor (Bre-Ex) was required to install a new sewer pipe below the CPR railway tracks from McCormick Park to the north end of McCormick Boulevard. This pipe was to be installed by a jack and bore method over a distance of approximately 44 metres.

This method of installation requires a pit to be dug on either side of the tracks, called the "sending pit" and the "receiving pit". A hydraulic jack is lowered into the sending pit where a cutting head is used to bore through the soil below the tracks to allow for the installation of a 710mm diameter steel casing sleeve to reach the receiving pit. Once this steel casing sleeve has been placed between the two pits the new sewer pipe can be inserted through the casing and installed.

This jack and bore work is coordinated in great detail with CPR and continuous monitoring is put in place to ensure that there are no track settlements as a result of the work. CPR approval is required for any work below their right-of-way, including this jack and bore procedure.

The use of this method allowed for the railway to remain operational throughout the construction, which was a requirement from CPR.

Cause of Additional Costs

During the jack and bore work the boring machine encountered several large boulders at about the 33 metre mark (approximately 75% complete). After numerous attempts and various meetings with the consultant, contractor, geotechnical specialists and the City, it was determined that the obstruction could not be cleared by continuing to jack and bore as originally intended. An alternative solution was developed by the sub-contractor, which was ultimately accepted and approved by CPR. It should be noted that AGM and the City worked diligently with Bre-Ex and CPR in order to expedite the approval process, however the approval from CPR took approximately two months.

The Solution

The agreed solution was to install a larger 1200mm diameter steel casing sleeve from the other side of the obstruction (the receiving pit) until the obstruction was reached. From this steel casing sleeve the obstruction could be removed and the new sewer pipe could be installed as originally intended.

This work was successfully carried out between December 2016 and February 2017.

Additional Costs and Explanation of Request

It is important to note that the City retained consultant AGM was on site full time to verify all labour hours and equipment usage to validate the claims submitted by the contractor. The values noted below have been reached through numerous negotiations and discussions between the City, AGM and the Contractor. All values below include the contractor markup as allowed by Ontario Provincial Standard Specification 127. To-date the additional costs due to the boulder obstruction are summarized in the following table:

Item	Approximate Value
Additional labour	\$104,730
Standby costs during CPR approval	\$41,600
Equipment rental rental and usage	193,508
Material	\$47,662
TOTAL	\$387,500

The contingency for this project was \$250,000 and, despite a number of line items included in the contract not being fully utilized the contract requires an additional \$310,000 (not including HST) to complete. As the project is still incomplete this value includes a contingency of \$90,000 for any unforeseen changes. The works remaining to complete includes:

- Concrete curb at north end of McCormick
- Base asphalt at north end of McCormick
- Topsoil and sod at north end of McCormick
- Manhole and catchbasin adjustments
- Top coat of asphalt on McCormick (Dundas St. to north end)
- Tree replacement in McCormick Park

- Grouting of abandoned sanitary sewer on Ashland Boulevard

While the consultant, AGM, has incurred additional costs they are able to complete the remaining works noted above within their original contract value.

CONCLUSION

Due to an unforeseen condition extra work was required to complete the jack and bore beneath the CPR railway, allowing for the installation of a new sewer pipe. While the cost for this extra work was minimized through diligent work in expediting the approval process with CPR the project contract value was exceeded. Therefore, in order to complete the remaining contract work on this project an amendment to the contract value is required.

On this basis, staff recommends that the McCormick Area Reconstruction (Tender T16-21) contract value be amended to a limit of \$3,385,067.28 not including HST, in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy.

ACKNOWLEDGEMENTS:

This report was prepared with assistance from Brian Nourse, P.Eng., Construction Administration Division.

PREPARED BY:	REVIEWED & CONCURRED BY:
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March 24, 2017

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Attach: Appendix "A" – Sources of Financing