

The Corporation of the Town of Milton

Report To:	Council
From:	Barbara Koopmans, Commissioner, Development Services
	Glen Cowan, Chief Financial Officer / Treasurer
Date:	June 22, 2020
Report No:	DS-013-20
Subject:	Fifth Line Professional Engineering Design Fees
Recommendation:	THAT Council approve the contract increase to WSP Canada Group Ltd., for Professional Engineering Design Services for the design of Fifth Line from Hwy 401 to Derry Road, in the amount of \$768,697 (exclusive of HST);
	AND THAT the budget for project C340040/41/42 - Fifth Line (Hwy 401 to Derry Road) be increased by \$859,703, funded 90% from Development Charges and 10% from the Project Variance Account;
	AND FURTHER THAT the Manager, Purchasing and Risk Management be authorized to execute the contract changes, as outlined by the purchasing by-law, and the Mayor and the Town Clerk be authorized to sign any other required paperwork.

EXECUTIVE SUMMARY

This report provides a status update on the design of Fifth Line from Hwy 401 to Derry Road.

To address additional work requirements as outlined through this report and complete the detailed design up to and including construction contract award, a contract increase in professional engineering design services in the amount of \$768,697 (excluding HST is being recommended.

The increased contract costs, along with additional project requirements such as increased internal project management time, results in a total recommended budget increase of \$859,703 for the project.



As per Section 6.2.12 of the Purchasing By-law No. 061-2018, Council approval is required. Council approval is also required for capital project budget increases over \$250,000 per Budget Management Policy No. 113.

REPORT

Background

The need for the reconstruction and widening of Fifth Line was identified as a requirement as part of the Derry Green Corporate Business Park Secondary Plan. In late 2011, McCormick Rankin Corporation (now WSP Canada Group Ltd.) was retained by the Town of Milton to provide professional engineering design services for the reconstruction and widening of Fifth Line from Hwy 401 to Derry Road in the total amount of \$984,750 (exclusive of HST) under CORS-005-11. No change orders have been issued to-date. Included within the scope of the professional engineering design services contract was the completion of a Class Environmental Assessment Study (Class EA) and detailed design.

Fifth Line is a two-lane rural roadway with an at-grade crossing of the Canadian Pacific Railway (CPR). The purpose of the EA study was to confirm the need for the proposed improvements based on traffic data, identify the effects on the environment of the alternative design options and identify the preferred alternative for the proposed widening of Fifth Line, including a future grade separation at the CPR rail crossing. Fifth Line is generally situated within lands of the Derry Green Corporate Business Park, which are designated for industrial and business park employment uses. In 2010, the Town of Milton adopted the Derry Green Corporate Business Park Secondary Plan. The Secondary Plan identified future land uses and a transportation network within the area bounded by Hwy 401, the Middle Branch of Sixteen Mile Creek, Sixth Line, the Centre Branch of Sixteen Mile Creek and James Snow Parkway.

Discussion

The Class Environmental Assessment Study (Class EA) started in 2012 and was finalized in spring 2015. As part of the EA Study, background information was gathered for existing and future conditions including the following:

- Land Uses
- Heritage
- Stage 1 Archeology
- Assessment of Natural Environmental Features (vegetation inventory, fisheries, bird and amphibian surveys)
- Wildlife and Species at Risk (SAR) Habitat Screening
- Drainage and Stormwater Management Strategy
- Development
- Evaluation of Alternative Design Options and Recommended Plan



One notable feature which was identified within the right-of-way (ROW) of Fifth Line is the existing 500mm high pressure transmission gas main, which runs along the west side of the existing Fifth Line ROW. This main runs from the transmission gas corridor, which crosses Fifth Line approximately 500m south of Derry Road up to Hwy. 401, and has had a significant impact on the Fifth Line project. This high pressure transmission gas main is the gas source for the Trans Canada Energy Generation Plant located immediately west of Sixth Line, north of Hwy 401 in Halton Hills. A significant test hole program, which had not been previously scoped, was undertaken to confirm the depths and location of the transmission gas main by means of hydrovac daylighting services. The gas main had to be day-lighted at regular intervals along Fifth Line as well as at crossing locations for intersections and proposed drainage culverts. Due to the location of the high pressure gas main, the road alignment of Fifth Line had to be shifted to the east to avoid conflict and impact with the gas main. Relocation of the gas main is not feasible.

In 2014, when the EA Study was nearing completion and the recommended plan for the preferred widening of Fifth Line had been identified, Halton Region was preparing its multi-year project for the extension of Regional servicing to the Derry Green Business Park. As part of the proposed servicing works, a trunk sanitary sewer and watermain were to be installed within the project limits of Fifth Line. Due to the deep installation of the sanitary sewer, closure of Fifth Line between Main Street East and Derry Road was required. In addition to the closure of Fifth Line, as the proposed servicing works had significant impacts on the existing roadway and infrastructure, it was agreed between Halton Region and the Town of Milton that the restoration of Fifth Line should be completed to the new profile grade identified in the EA. As the required road widenings had not been secured, Fifth Line would be required to be restored as a two-lane rural roadway and widened in the future with temporary culvert crossings. To facilitate the two-lane rural roadway, an interim stormwater management strategy had to be developed as well as the preparation of an additional construction design package and specifications including the application for and facilitation of all required permits. This work was beyond the scope of the original project.

Upon completion of the EA Study in the spring of 2015, the detailed design for Fifth Line was directed to be put on hold. During this time, Halton Region proceeded with the servicing for the Derry Green Business Park between 2015 and 2019 and the Ministry of Transportation proceeded with the replacement and widening of the Fifth Line structure at Hwy 401. Both projects proceeded with the closure of Fifth Line.

During late summer 2018, WSP (formerly McCormick Rankin and MMM Group) was directed to re-commence the detailed design plans for Fifth Line. Due to the elapsed time of the above noted Derry Green Business Park servicing, in addition to the three year delay since the completion of the EA Study, the existing conditions along Fifth Line



as well as agency/permitting requirements had changed, resulting in impacts to the overall project scope. Some of these changes include:

- Additional field investigations
- New topographical survey of the project limits which included updating the base plans, digital terrain model and project cross sections
- Natural environment updates including re-documenting watercourses and vegetation features, SAR assessments and bat habitat survey
- Review impacts of culvert work and related works including fish habitat and mitigation
- New permitting requirements on Environmentally Sensitive Areas (ESAs) from Ministry of the Environment, Conservation and Parks (MECP) and the Department of Fisheries and Oceans (DFO)
- Review and coordination with adjacent development site plans, adjustments to stormwater / drainage measures, grading impacts and traffic assessment
- Changes to property lines and property ownership

In addition to the above, the reconstruction of Fifth Line will now be completed in two phases under two separate construction contracts. Both contracts will require separate sets of drawings, specifications and permits.

- Contract 1 will include Fifth Line North from Hwy 401 to approximately 150m south of Main Street East. This contract will also be combined with the proposed works for the reconstruction and widening of Main Street East from James Snow Parkway to Fifth Line
- Contract 2 will include Fifth Line from approximately 150m south of Main Street East to Derry Road

Due to the continued advancement of the development in the Derry Green Business Park, additional coordination staging will also be required with related parties.

In order to address the additional work noted above and to complete the detailed design of Fifth Line (from Hwy 401 to Derry Road) up to and including construction contract award, an increase in design fees of \$768,697 (excluding HST) is required. This amount has been derived using hourly rates form the Town's existing consulting roster (which were obtained through a competitive process), and the work plan and resulting level of effort has been validated by Town staff.

Financial Impact

The current approved capital budget for project C340040/41/42- Fifth Line (Hwy 401 to Derry) Design is \$1,239,583 which has been fully spent.



As outlined through this report, a contract increase in the amount of \$782,226 (including non-recoverable HST) is being recommended for this project. Staff recommend a further increase to the budget in the amount of \$77,477 to allow sufficient budget for the related increased internal project management time requirements as well as permit costs.

The total budget increase recommended on this project is \$859,703 as outlined below:

	Approved Budget	Budget Amendment	Revised Budget
Funding			
Reserve/Reserve Funds	(123,958)	(85,970)	(209,928)
Development Charges	(1,115,625)	(773,733)	(1,889,358)
Total Funding	(\$1,239,583)	(\$859,703)	(\$2,099,286)
Expenditures			
Town Administration Contingency	5,399	17,269	22,668
Professional Fees	1,002,081	797,434	1,799,515
Transfers	232,103	45,000	277,103
Total Project Cost	\$1,239,583	\$859,703	\$2,099,286

In accordance with the original funding sources of the project, the increased budget requirement of \$859,703 would be funded 90% from Development Charges and 10% from the Project Variance Account.

Respectfully submitted,

Barbara Koopmans, MPA, MCIP, RPP, CMO Commissioner, Development Services

Glen Cowan Chief Financial Officer / Treasurer

For questions, please contact: Patrick Charron / John Brophy Ext.: x2510 / x2516

Attachments		
None		

CAO Approval Andrew M. Siltala Chief Administrative Officer