
Subject: Regional Road 38 (Martindale Road) Amending Agreement with Engineering Consultant Wood Canada Limited operating as Wood Environment & Infrastructure Solutions

Report to: Public Works Committee

Report date: Tuesday, October 13, 2020

Recommendations

1. That Council **APPROVE** the increase to the current Engineering Agreement between Niagara Region and Wood Canada Limited operating as Wood Environment & Infrastructure Solutions ("**Wood**") by \$190,409, for a new total value of \$1,250,838 (excluding 13% HST); and
2. That Council **AUTHORIZE** the Commissioner of Public Works to execute an amendment to the Engineering Agreement between Niagara Region and Wood incorporating the increase proposed in recommendation 1 above.

Key Facts

- Wood currently has an Engineering Agreement with Niagara Region to undertake the Environmental Assessment, Detailed Design, Contract Preparation and Contract Administration and Inspection for the Reconstruction of Regional Road 38 (Martindale Road) in the City of St. Catharines.
- A change Purchase Order (PO# 0000049746) will be dispatched once Council authorizes the execution of the Amending Agreement and approves the Purchase Order increase.
- The recommended Engineering Agreement amendment is required to accommodate: (1) a change request by the Ministry of Transportation (MTO), a cost sharing partner, to address additional design work on an MTO asset (new overhead sign structure); and (2) Wood's request for additional fees for Contract Administration and Inspection services due to project delays experienced with the pile driving and centre pier construction in late 2019 and early 2020.
- The cumulative value of the Engineering Agreement, inclusive of this proposed amendment, will exceed \$1,000,000 and therefore requires the authorization of Regional Council in accordance with Niagara Region's procurement By-law 02-2016 as amended on February 28, 2019 pursuant to Section 18 (c) and Schedule B.

Financial Considerations

The total value of Wood's Engineering Agreement, including the recommended increase herein, from the initiation of the Environmental Assessment to completion of the construction contract will have a maximum limit of \$1,250,838, comprised of the amounts detailed at Appendix 2, and summarized as follows:

- In 2013, Niagara Region engaged Wood (pursuant to a competitive process 2013-RFP-81) at a cost of \$346,514, to undertake a Municipal Class Schedule "C", Environmental Assessment (EA) and detailed design assignment for Regional Road 38 (Martindale Road) from Highway QEW to Regional Road 77 (Fourth Ave).
- Throughout the design, there were modifications to the original scope in the value of \$189,532; including rehabilitation work of the existing structure to be paid for by the MTO; amendments to address new MTO design standards; construction staging; inclusion of a watermain replacement for Water and Wastewater; and the tendering of two separate construction contracts, as referenced in Appendix 2.
- The Phase 1 construction contract (QEW to Barton St.) is currently under warranty and was administrated and inspected by Niagara Region staff.
- The Phase 2 construction contract (Barton St. to Fourth Ave.) is currently under construction and being administrated and inspected by Wood, at an approved maximum limit of \$351,600 per the per diem rate included in the original 2013-RFP-81. Included in the current Purchase Order is the material testing and Quality Verification Engineering (QVE) at an estimated value of \$168,213. The material testing and QVE are necessary to comply with MTO requirements.

The recommended Engineering Agreement amendment is required to accommodate the following project changes:

1. a change request from the MTO for the design of an overhead sign structure; including foundation investigation; live loading analysis; and a centre pier batter adjustment for a value of \$49,324; and
2. an additional scope change request from Wood in the amount of \$145,655, for additional QVE, Contract Administration and Inspection services, arising due to

project delays experienced with the pile driving and centre pier construction in late 2019 and early 2020; the additional fees represent an estimate maximum amount of fees from September 2020 to completion of the project, presently estimated at end of 2020.

Included in the maximum limit of \$1,250,838 are the recovery costs from the cost sharing partners on this project at the following estimated values: MTO for a value of \$211,226, and the City of St Catharines for a value of \$56,184. Therefore the total cost to be incurred by Niagara Region as part of Wood's Engineering Agreement, including the recommended increase, amounts to \$983,428.

Staff have confirmed there are sufficient funds in the project budget (10RC0627) to address the total amount of the change PO request. Amounts noted in the Financial Considerations section of this report exclude 13% HST.

Analysis

While sufficient funds remain in the project budget, the proposed increase brings the cumulative value of the Engineering Agreement above \$1,000,000, and therefore requires Regional Council approval pursuant to Section 18(c) and Schedule "B" of Niagara Region's procurement By-law 02-2016 as amended on February 28, 2019.

Niagara Region staff have worked with Wood and the contractor's project teams to find cost savings measures on this project. In order to remain in compliance with MTO's requirements, Niagara Region is presently continuing the material testing and sampling, QVE and inspections on the project. These items are required to ensure proper workmanship by the contractor and ensure the end product meets the MTO's standards.

Niagara Region currently has an agreement with Wood to complete the work in compliance with the MTO requirements. Wood has extensive knowledge of the work required by the Contractor to bring the project to a timely completion, including the construction of the new bridge structure and the rehabilitation of the existing structure on Regional Road 38 (Martindale Rd.) spanning over Highway 406. Wood will continue to provide the required services in compliance with the MTO requirements, and to advise of any contract discrepancies. It is critical to complete the project on a timely basis in order to mitigate increases to overall construction costs, disruption and inconvenience to vehicular traffic.

Alternatives Reviewed

The Project Team reviewed the alternative option of stopping construction to allow a formal procurement to proceed. This would add significant project delay, negatively impact the planned works in 2021, increase construction costs and impact on the users of Martindale Road, as the road will need to remain closed for a longer period and potentially cause conflicts with the planned construction works in 2021, causing Ministry of Labour constructor issues.

Relationship to Council Strategic Priorities

Approving this recommendation by staff will align with Council's Strategic Priority to:

- Support businesses and encourage economic growth,
- Promote a Healthy and Vibrant Community,
- Reasonable Growth and Infrastructure Planning.

Allowing construction to continue will support the economic growth in the Niagara region, providing many quality jobs. The new structures on Regional Road 38 (Martindale Rd.) over Highway 406 will aid in alleviating traffic congestion and provide a more complete pedestrian and cycling network.

Other Pertinent Reports

PW 29-2019 – Award of construction contract to Rankin Construction.

PWC-C 19-2020 - Regional Road 38 (Martindale Road) Bridge Structure Closure memorandum.

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Recommended by:

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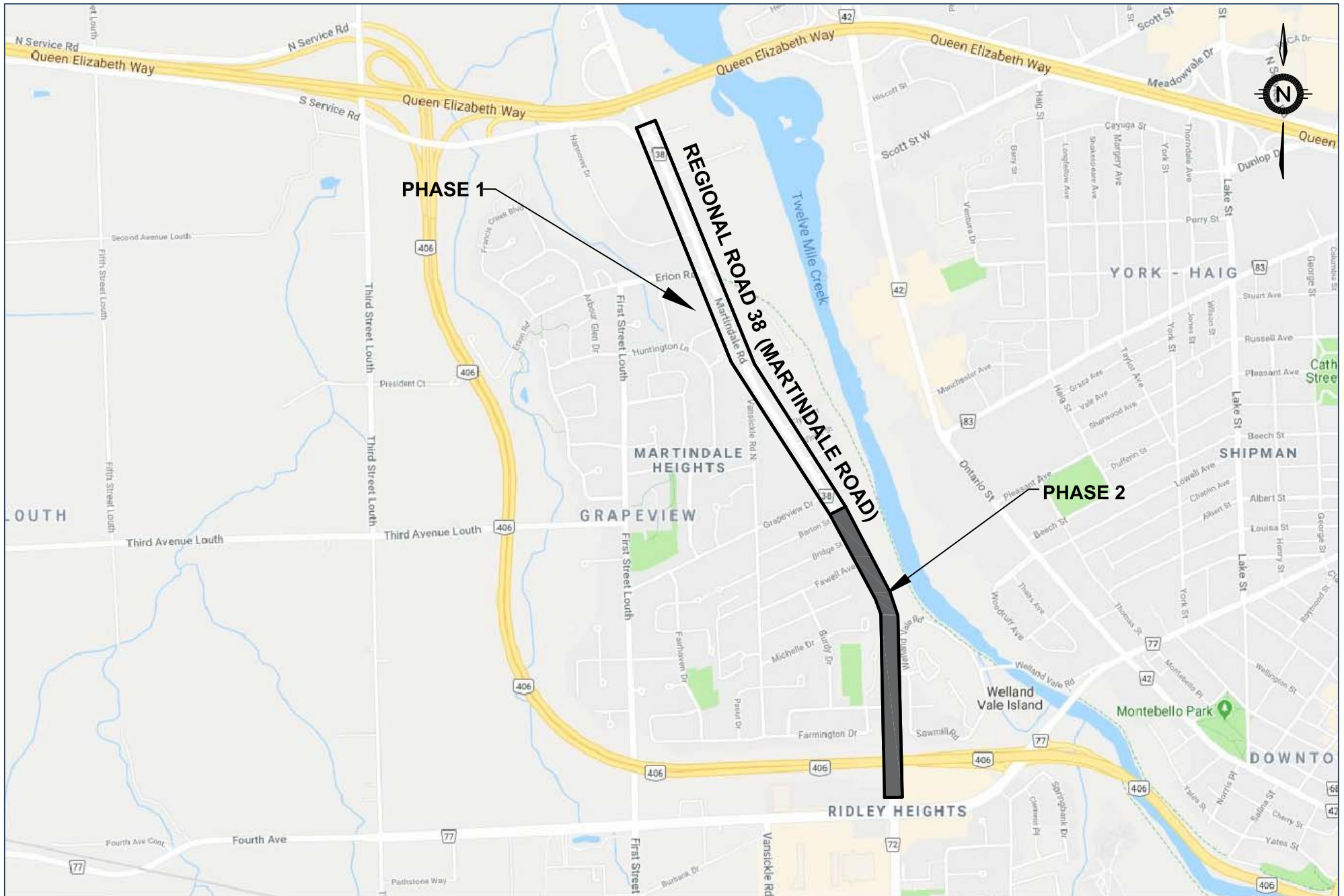
Submitted by:

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This report was prepared in consultation with Brian McMahon, Program Financial Specialist, Frank Tassone, Associate Director Transportation Engineering, Scott Crocco, Legal Counsel and reviewed by Carolyn Ryall, Director Transportation Services.

Appendices

Appendix 1	Key Plan
Appendix 2	Costing Breakdown



PW 40-2020 APPENDIX 2
Costing Breakdown
Wood Project Costing Breakdown
Regional Road 38 (Martindale Road) Amending Agreement with Engineering Consultant Wood

Wood's Project Cost (10RC0627)*

	Engineering Agreement Costs
(a) Original Assignment (EA & Detail Design) 2013-RFP-81	\$346,514.00
(b) Addition of Traffic analysis, inc alternatives requested by Councilors	\$35,374.00
(c) Addition of Regional watermain modeling & design	\$4,870.00
(d) Addition of MTO Existing Bridge Rehabilitation Design (MTO Request)	\$86,273.00
(e) MTO Permit, Property expropriation, temporary signal design	\$28,528.00
(f) Update contract to new bridge structure design standards	\$31,283.00
(g) MTO Existing Bridge soffit review (MTO Request)	\$3,204.00
(h) Contract Administration & Inspection	\$351,600.00
(i) Quality Verification Engineering	\$168,213.00
(j) Existing Structure Live loading analysis	\$4,570.00
(k) Hwy 406 Overhead Sign Design (MTO Request)	\$24,949.00
(l) Hwy 406 Overhead Sign Foundation Investigation (MTO Request)	\$15,560.00
(m) Centre Pier Design, Batter design & Traffic Staging	\$4,245.00
(n) Additional Request QVE, CA & Insp conceniding with new construction schedule	\$145,655.00
Total Estimated Wood's Cost	\$1,250,838.00

* All costs shown do not include tax (HST & Non-recoverable)