



Clause No. 1 in Report No. 3 of Commissioner of Transportation and Community Planning was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on November 13, 2014.

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**CONSULTANT SERVICES FEE FOR ADDITIONAL SCOPE
MAJOR MACKENZIE DRIVE FROM CPR TRACKS TO HIGHWAY 400
CITY OF VAUGHAN**

1. RECOMMENDATIONS

It is recommended that:

1. Council authorize the agreement between the Region and HDR Corporation for the design of improvements to Major Mackenzie Drive (Y.R. 25) from Islington Avenue (Y.R. 17) to Weston Road (Y.R. 56) be amended to increase the contract price, within the Capital Spending Authority for this project, from \$2,536,973 to \$2,986,973, excluding HST, as a result of extending the eastern project limit from Weston Road to Highway 400, and revising the design to widen to six lanes instead of four lanes.
2. Council authorize the agreement between the Region and AECOM Canada Inc. for the design of improvements to Major Mackenzie Drive (Y.R. 25) from the Canadian Pacific Railway tracks to Islington Avenue (Y.R. 17) be amended to increase the contract price, within the Capital Spending Authority for this project, from \$1,564,360 to \$2,164,360, excluding HST, as a result of revising the design to widen to six lanes instead of four lanes.

2. PURPOSE

This report seeks Council authorization to increase the contract price of two separate contracts for the design of improvements to Major Mackenzie Drive; the contract with HDR Corporation (HDR) and the contract with AECOM Canada Inc. (AECOM). These increases are required to address the increased scope of services related to revising the design to accommodate six lanes, and extending the eastern project limit from Weston Road to Highway 400.

As the additional fees being requested exceed staff authority provided for in the Region's Purchasing Bylaw, Council approval is required.

3. BACKGROUND

The Western Vaughan Individual Environmental Assessment evaluated options to address transportation needs in western Vaughan

The Western Vaughan Individual Environmental Assessment (IEA) was initiated in 2007 and builds on previous studies and the key initiatives outlined in the 2009 Transportation Master Plan (TMP) Update. Using the TMP as an overall guideline, the IEA focused on the Western Vaughan area and provided additional assessment with respect to alternative transportation networks, detailed environmental inventories and updated development forecasts to identify a sustainable transportation network solution that will encourage multi-modal travel. The Western Vaughan IEA was approved in July 2012.

The approved Western Vaughan IEA identified widening Major Mackenzie Drive to six lanes as one of the near-term projects

One of the key findings of the Western Vaughan Individual Environmental Assessment was that Major Mackenzie Drive from Highway 50 to Highway 400 be widened to six lanes by 2031. As such, the reconstruction of Major Mackenzie Drive from Highway 50 to Highway 400 is included in the Region's current 10-Year Roads Capital Construction Program. The first section to be tendered will be from Pine Valley Drive to Weston Road, with construction to begin in 2015.

Detailed design, property acquisition and utility relocations are currently underway.

Council approved two consulting engineering assignments for the design of Major Mackenzie Drive

In September 2011, Council approved a detailed design assignment with HDR Corporation for the section of Major Mackenzie Drive from Islington Avenue to Weston Road. In June 2012, Council approved a second detailed design assignment with AECOM Canada Inc. for the section of Major Mackenzie Drive from the CPR tracks to Islington Avenue. These consultant assignments were based on designing an interim four-lane facility while protecting the ability to provide for six lanes in the future.

The Ministry of Transportation of Ontario recently approved the extension of Highway 427 to Major Mackenzie Drive

Recently, the Ministry of Transportation of Ontario (MTO) committed to extending Highway 427 from Highway 7 to Major Mackenzie Drive by the year 2021. The timing of the Highway 427 extension was unknown when the two design assignments for Major Mackenzie Drive were awarded.

4. ANALYSIS AND OPTIONS

Staff recently reviewed construction phasing and concluded it is best to build six lanes now instead of four

The original plan was for Major Mackenzie Drive to be widened in two phases. In the first phase, a four-lane roadway was to be built with provisions to expand to a six-lane roadway in a future phase. With the MTO recently announcing the extension of Highway 427, staff undertook a review of the construction phasing and concluded that all six lanes should be built now. The key reasons for this decision include:

- Major Mackenzie Drive is a significant east/west roadway between Highway 400 and Highway 50.
- The Highway 427 extension will terminate at Major Mackenzie Drive which will increase traffic volumes on Major Mackenzie Drive.
- The new communities adjacent to Major Mackenzie Drive are developing and growing quickly.
- Building six lanes now will assist with construction staging requirements, especially at the bridges.
- It will eliminate the need to widen in the future along with the associated impact to motorists and the community.

HDR's contract needs to be increased to design the six-lane widening of Major Mackenzie Drive from Islington Avenue to Highway 400

The limits of the original consulting assignment for HDR are from Islington Avenue to Weston Road. The roadway will need to be designed to six lanes.

In addition, Major Mackenzie Drive between Weston Road and Highway 400 was not included in the HDR consulting assignment as it was already a four-lane roadway and, at that time, only a four-lane roadway was contemplated. With the decision to widen west of Weston Road to six lanes, the section between Weston Road and the Highway 400 interchange should also be widened to six lanes. HDR is best suited to also do this work as they are familiar with the area, are already designing the contract west of Weston Road, and understand the Region's requirements.

An additional fee of \$450,000 is required to complete this work.

AECOM's contract needs to be increased to design the six-lane widening of Major Mackenzie Drive from the CPR tracks to Islington Avenue

The limits of the consulting assignment for AECOM are from the CPR tracks to Islington Avenue. While the limits will not change, an additional fee of \$600,000 is required to cover the revision of the design for widening to six lanes.

This additional fee will also cover design modifications to the Humber River bridge. The design of the bridge being carried forward was based on the design proposed under the Western Vaughan IEA. The revised design will significantly reduce the overall construction and future maintenance costs.

Link to key Council-approved plans

The reconstruction and widening of Major Mackenzie Drive between the CPR tracks and Highway 400 aligns with the 2011 to 2015 Strategic Plan to “continue to deliver and sustain critical infrastructure”. The project will provide additional east/west transportation capacity by widening Major Mackenzie Drive from two lanes to six lanes.

5. FINANCIAL IMPLICATIONS

Additional fees in the amount of \$1,050,000 are required to complete the design assignments. Staff have reviewed and negotiated the request for additional fees. Staff have compared the fees to both the rates in the current assignments and against other similar consultant assignments, and consider them to be fair and reasonable. With a total project cost of \$100 million, the overall design fees are in line with fees charged for similar projects in the industry.

There are sufficient funds in the 2014 Roads Capital Budget to cover this additional work. All expenditures for this project will be funded at 10 per cent tax levy and 90 per cent from development charges.

6. LOCAL MUNICIPAL IMPACT

The widening of Major Mackenzie Drive provides many benefits to the residents of the City of Vaughan including:

- Improved roadway and traffic flow from Highway 50 to Highway 400
- Support residential and commercial growth in the area
- Improved pedestrian/cyclist access through the sidewalks and multi-use path
- Illumination and noise mitigation where required
- Median and boulevard streetscaping

7. CONCLUSION

As the design has progressed, requirements are being refined to ensure the Region is delivering the best solution for this section of Major Mackenzie Drive in both the short and long term. The recent decision to build six lanes now instead of in the future has

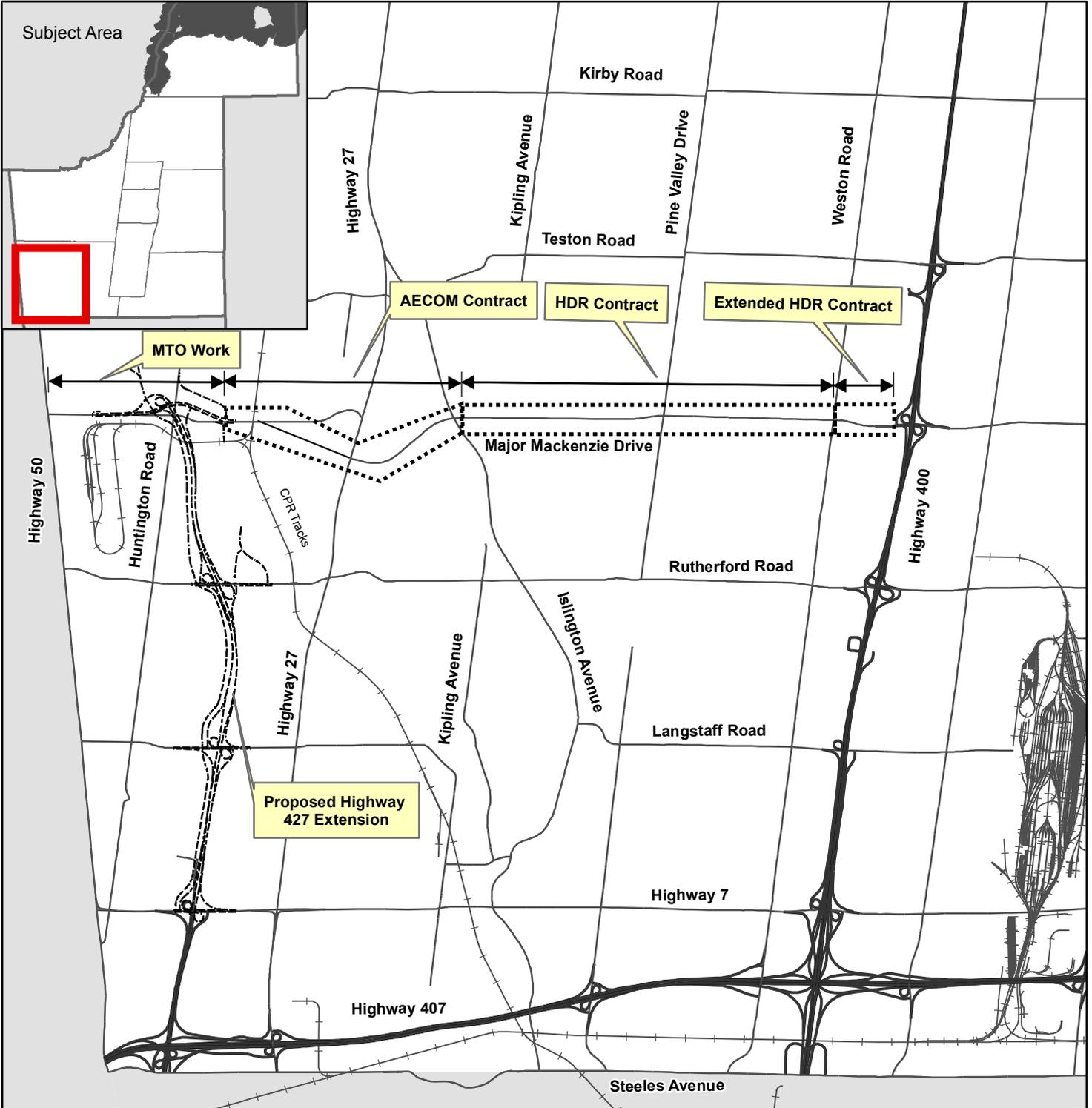
resulted in additional design work that was not contemplated when the consulting assignments were first procured.

It is recommended that additional fees in the amount of \$450,000 be added to the HDR assignment increasing the total value from \$2,536,973 to \$2,986,973, excluding HST, and additional fees in the amount of \$600,000 be added to the AECOM assignment, increasing the total value from \$1,564,360 to \$2,164,360, excluding HST.

For more information on this report, please contact Salim Alibhai, Director, Capital Planning and Delivery at ext. 75229.

The Senior Management Group has reviewed this report.

Attachment (1)



Location Map

Consultant Services Fee For Additional Scope
 Major Mackenzie Drive from CPR Tracks to Highway 400
 City of Vaughan
 November 13, 2014



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Legend

- Provincial Highway
- Regional Road
- Railway
- Proposed 6-Lane Road

