The Regional Municipality of York

Committee of the Whole Transportation Services February 6, 2020

Report of the Commissioner of Transportation Services

Amendment to Agreement for Consultant Services Major Mackenzie Drive Road Improvements Jane Street to Keele Street, City of Vaughan

1. Recommendations

- 1. Council approve an amendment to the agreement between the Region and HDR Corporation for engineering consultant services for improvements to Major Mackenzie Drive (Y.R. 25) from Jane Street (Y.R. 55) to Keele Street (Y.R. 6) to increase the contract price from \$1,259,338.00 to \$1,956,780.00, excluding HST.
- 2. Council approve an increase in total 2020 budgeted expenditures of \$697,442 and an increase in 2020 project Capital Spending Authority of \$697,442 for engineering consultant services for Major Mackenzie Drive improvements, from Jane Street to Keele Street. The increase in 2020 project Capital Spending Authority would be offset from within the 2020 Capital Spending Authority for Transportation Services.

2. Summary

This report seeks Council approval to increase the contract price of the agreement with HDR Corporation (HDR) for the design of improvements to Major Mackenzie Drive. The additional fees are required to increase the scope of services for detailed design of the proposed improvements between Jane Street and Keele Street. A location map is included as Attachment 1.

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

Key Points:

- Major Mackenzie Drive connects and provides access to critical infrastructure. The proposed road improvements will support travel to and from Highway 400, between the existing Mackenzie Richmond Hill Hospital and proposed Mackenzie Vaughan Hospital, as well as adjacent communities and commercial retail spaces.
- Council, City of Vaughan and other stakeholders have clearly expressed a strong desire to accelerate the improvements on Major Mackenzie Drive.

• Increasing the scope of services for HDR's assignment to undertake the detailed design of the section between Jane Street and Keele Street would ensure continuity of consultant services and allow for expedited project delivery.

3. Background

Major Mackenzie Drive, from Jane Street to Keele Street, provides a critical connection to the new Mackenzie Vaughan Hospital and Highway 400

Mackenzie Health will operate a two-site hospital model. Both Mackenzie Richmond Hill Hospital and the new Mackenzie Vaughan Hospital will provide core hospital services and each will provide a different set of speciality programs and services. Core services offered at Mackenzie Vaughan Hospital will include obstetrics, integrated stroke and mental health, making the link between the facilities even more critical. Construction of the new Mackenzie Vaughan Hospital is currently underway with completion planned by end of 2020.

The Region recently completed two environmental assessment studies for improvements on Major Mackenzie Drive

In March 2019, the Region completed a Municipal Class Environmental Assessment (EA) study for Major Mackenzie Drive from Highway 400 to Jane Street. The EA study addressed the necessary improvements adjacent to the future hospital and Canada's Wonderland, and also identified necessary improvements to Major Mackenzie Drive across Highway 400 interchange, which is integral to providing multimodal connections. In accordance with the recommendations of the study, the Region is working on the detailed design to widen Major Mackenzie Drive from Highway 400 to Jane Street to six lanes.

In February 2019, the Region completed an EA study for Major Mackenzie Drive from McNaughton/Avro Road to Keele Street. The EA study recommended operational improvements to ease congestion, including the installation of a new continuous centre turning lane to allow left-turning vehicles to access the adjacent properties without impeding through traffic. The study also recommended new traffic signals at Gram Street, a new eastbound right turn lane at Keele Street and a new multi-use path on Major Mackenzie Drive.

Council has expressed a clear desire to accelerate projects on Major Mackenzie Drive to ease congestion on the busy corridor and improve access to the new Mackenzie Vaughan Hospital

With the Mackenzie Vaughan Hospital scheduled to open by end of 2020, Council has expressed a strong desire to implement the recommended operational improvements from the EA as soon as possible. Making the improvements to Major Mackenzie Drive will improve traffic flow in the corridor and improve access to the two hospitals.

The design of Major Mackenzie improvements from McNaughton/Avro Road to Keele Street has not yet begun as engineering consultant services have yet to be procured.

City of Vaughan plans to provide new active transportation facilities on Major Mackenzie Drive from Jane Street to McNaughton/Avro Road

City of Vaughan intends to construct new active transportation facilities in the corridor between Jane Street and McNaughton/Avro Road. These include a pedestrian and cycling connection between the two Regional projects noted above to connect with the facility installed recently through the culvert replacement project east of McNaughton/Avro Road. This will provide access to Vaughan's proposed Super Trail and overall, create a continuous active transportation route from Highway 50 to Keele Street.

City of Vaughan has requested the Region undertake this work as part of the Region's improvements on Major Mackenzie Drive. This would expedite delivery of the overall improvements in the corridor and minimize impact and disruption to the travelling public and community.

This segment of Major Mackenzie Drive is approximately 800m long and is located between the two aforementioned projects. In the interest of preventing future disruption to the public, the Region will also resurface and upgrade the intersections on the section of Major Mackenzie Drive between Jane Street and McNaughton/Avro Road. This will ensure the road corridor is upgraded from Jane Street to Keele Street.

The design for the upgrade of the active transportation facilities has not yet been initiated by the City or the Region.

4. Analysis

HDR Corporation's technical familiarity with the Major Mackenzie Drive corridor from McNaughton/Avro Road to Keele Street would accelerate project delivery

HDR was initially retained by the Region to undertake the EA and design of improvements to Major Mackenzie Drive from Killian Road to Keele Street. The scope of the assignment was subsequently revised to extend the limits of the EA study westerly to McNaughton/Avro Road, and to undertake the design and contract administration of the emergency replacement of a major culvert crossing of Major Mackenzie Drive east of McNaughton/Avro Road and infrastructure for the City of Vaughan. Having been directly involved in the study for this corridor and the recently completed culvert replacement project, HDR's design team is familiar with the project requirements and site constraints. This is important due to the constrained nature of the corridor, located within the Maple Heritage District area.

Through the EA study and the culvert replacement design, HDR is also acutely aware of the challenges and sensitivities associated with the project, including the importance of a clear staging strategy to maintain proper access to adjacent residents and businesses and minimize disruption and impact to a community that has endured construction activity over the last few years. HDR's familiarity with the corridor would expedite the detailed design of this section, accelerating project delivery by allowing construction to proceed sooner.

HDR has also established good working relationships with key stakeholders (e.g. utility agencies, City of Vaughan staff and environmental permitting agencies).

It is therefore proposed to leverage HDR's expertise and experience in delivering detailed design services for Major Mackenzie Drive by amending the existing agreement to include the detailed design of road improvements from Jane Street to Keele Street, including the new active transportation facilities requested by the City of Vaughan.

Through the detailed design assignment, impacts to existing utilities will be identified. Provided there are limited utilities to be relocated and no property to be acquired, the construction of Major Mackenzie Drive improvements between Jane Street and Keele Street could begin in 2022. This would allow for at least the potential relocation of a high pressure Enbridge gas main and Bell ancillary fibre optic line in the north boulevard in late 2020 and 2021.

5. Financial

Funds are required to design the Major Mackenzie Drive Improvements between Jane Street and Keele Street

The agreement with HDR Corporation would require amending to include additional fees in the amount of \$697,442, excluding HST, to provide for engineering consultant services. Staff has reviewed the request for additional fees, compared them to rates in the current assignment, and against other similar consultant assignments, and considers them to be fair and reasonable.

The budget for improvements to Major Mackenzie Drive from McNaughton/Avro Road to Keele Street is \$8 million (total project cost). The project is funded through 90% development charges and 10% tax levy and is included in the 10-Year Capital Plan.

The cost of resurfacing and intersection upgrades between Jane Street and McNaughton/Avro Road are \$1.5 million. This cost would be funded from the Region's asset management budget.

Construction of the City of Vaughan new active transportation facility from Jane Street to McNaughton/Avro Road is anticipated to cost approximately \$500,000, assuming no utility relocation or property is required, and this cost would be fully recovered from the City of Vaughan.

Council approval is required to advance budget to fund the design work earlier than currently budgeted

Funds for the road improvements between McNaughton/Avro Road to Keele Street are budgeted for design commencing in 2021 and construction in 2024, as approved in the 2020 capital budget. Council approval is required to advance funds so that detailed design can begin in 2020. The design work for road improvements to Major Mackenzie Drive from Jane Street to Keele Street is anticipated to cost approximately \$697,442 in 2020 and 2021. The Region would recover approximately \$46,700 from the City of Vaughan for the design of active transportation facilities from Jane Street to McNaughton/Avro Road. The remaining \$650,742 for improvements would be funded by advancing project expenditures without increasing the expected overall cost of the project.

These adjustments would result in an increase in total 2020 budgeted expenditures of the project of \$697,442, and an increase in 2020 project Capital Spending Authority of \$697,442. The increase in 2020 project Capital Spending Authority would be offset from within the 2020 Transportation Services Roads budget.

6. Local Impact

Vaughan City Council previously submitted two Council resolutions (March 2014 and November 2015) requesting the Region review potential improvements to Major Mackenzie Drive from McNaughton/Avro Road to Keele Street. It is anticipated the local community will welcome the proposed operational improvements as they would improve traffic flow and access through the corridor.

The inclusion of road resurfacing and the City of Vaughan active transportation facilities from Jane Street to McNaughton/Avro Road as part of this design assignment, would streamline the design of both projects and allow the Region to coordinate construction.

Improvements to Major Mackenzie Drive, from Jane Street to Keele Street are anticipated to begin in 2022.

7. Conclusion

Council and the City of Vaughan have expressed a clear desire to accelerate improvements to Major Mackenzie Drive from McNaughton/Avro Road to Keele Street to improve traffic flow and access to the new Mackenzie Vaughan Hospital. In addition, the Region plans to resurface the roadway and the City of Vaughan is planning to provide active transportation facilities between Jane Street and McNaughton/Avro Road. The agreement with HDR Corporation needs amending so necessary engineering consultant services can be provided for the detailed design of the improvements to Major Mackenzie Drive between Jane Street and Keele Street. Staff recommends the agreement with HDR Corporation be amended by an amount of \$697,442, increasing the total from \$1,259,338 to \$1,956,780, excluding HST.

With Council approval, the construction on the section between Jane Street and Keele Street can begin in 2022.

For more information on this report, please contact Salim Alibhai, Director, Capital Planning and Delivery, at 1-877-464-9675 ext. 75229. Accessible formats or communication supports are available upon request.

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