





CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT
Transportation Operations and Maintenance Division
and
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Transportation Planning and Parking Division

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	June 14, 2021
SUBJECT/REPORT NO:	Road Safety Review and Appropriate Measures at the York Road and Newman Road Intersection (PW20071(a)/PED20196(a)) (Ward 13) (Outstanding Business List Item)
WARD(S) AFFECTED:	Ward 13
PREPARED BY:	George Vidovic (905) 546-2424 Ext. 4542 David Ferguson (905) 546-2424 Ext. 2433 Mike Field (905) 546-2424 Ext. 4576
SUBMITTED BY:	Edward Soldo Director, Transportation Operations & Maintenance Public Works Department
SIGNATURE:	
SUBMITTED BY:	Brian Hollingworth Director, Transportation Planning and Parking Planning and Economic Development Department
SIGNATURE:	

RECOMMENDATION

- (a) That the concept of a new roundabout at York Road and the Highway 6 ramp Terminal, which is being studied as part of an on-going design project by the Ministry of Transportation (MTO) to address existing operational issues at the York Road off-ramp, be endorsed in principle as a design solution for this intersection;
- (b) That the City request the Ministry of Transportation (MTO) to consider a design alternative for the roundabout that incorporates a left turn lane in the westbound direction at Newman Road to improve existing and future operations at this intersection;

- (c) That the estimated incremental cost of \$45,000 to expand the scope of the Ministry of Transportation (MTO) led design for the roundabout to include a left turn lane at York Road and Newman Road be funded through existing Capital Funds Project ID 4662020522 – Traffic Engineering – Signal Design 2020 and appropriated to the new Project ID 4662220522 – Transportation Engineering Design;
- (d) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor; and,
- (e) That the Outstanding Business List Item respecting Road Safety Review and Appropriate Measures at York Road and Newman Road Intersection, be considered completed and removed from the Public Works Committee Outstanding Business List.

EXECUTIVE SUMMARY

On July 9, 2019, the City Planning Committee considered an application to amend Town of Dundas Zoning By-law No. 3581-86 respecting lands located at 574 Northcliffe Avenue, Dundas (PED19132). At the July 2019 meeting, a number of concerns were raised with regard to traffic operations and safety at the intersection of York Road and Newman Road. At the subsequent July 12, 2020 Council Meeting, staff were directed to initiate a road safety review and identify appropriate measures at the York Road and Newman Road Intersection.

Transportation Operations and Maintenance (TOM) has completed a safety review of York Road between Old Guelph Road and Highway 6. Based on existing conditions, the intersection of York Road and Newman Road does not meet the warrants for the installation of a traffic signal. A review of the collision history between 2014 and 2018 does not identify safety concerns.

A warrant analysis based on traffic volumes was also undertaken to assess the need for a westbound left turn lane at York Road and Newman Road. The assessment shows that a left-turn lane is warranted on York Road in the westbound direction under both existing and future conditions.

As directed by Council, Transportation Planning staff initiated discussions with the Ministry of Transportation (MTO) with regard to options to improve traffic operations and safety along York Road in the vicinity of Newman Road. Through an on-going Preliminary Design Study initiated in April 2019, the MTO has developed a design concept for a roundabout at the Highway 6 at York Road West Ramp Terminal.

Opportunities to modify this design to include a westbound left turn lane at York Road and Newman Road are being considered.

A final improvement that will have an impact on York Road is the planned installation of a new traffic signal at Old Guelph Road. TOM staff have prepared a preliminary design for this signal and funding needs have been identified in the Capital Budget.

Alternatives for Consideration – See Page 7

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: MTO has retained a consultant to design a roundabout at the York Road and the Highway 6 ramp Terminal. The scope does not include the design of a left turn lane but can be expanded to be included as per Recommendation (b). MTO has indicated that there is an additional cost estimated at \$45,000 for the design of the left turn lane which is targeted to be completed by the end of 2021. Funding will be in place to support the additional cost through an appropriation adjustment from Project ID 4662020522 –Traffic Engineering – Signal Design 2020 to new Project ID 4662220522 – Transportation Engineering Design. This does not include the construction cost for the left turn lane which would be put forth as part of the 2022 Capital Budget Process with appropriate funding sources.

Project ID 4662220223 New Traffic Signal – York Road at Old Guelph Road was planned as part of the 2020 Capital Budget process with a project start in year 2022 at a gross cost of approximately \$500,000 with a net cost of \$24,000. The majority of the project is estimated to be funded by development charges. By approving this Report, there are no financial commitments related to the new traffic signal project. The project will be put forward for approval during the 2022 Capital Budget process for Council consideration.

Staffing: N/A

Legal: N/A

HISTORICAL BACKGROUND

On July 12, 2019, Council approved Notice of Motion 8.1, Road Safety Review and Appropriate Measures at the York Road and Newman Road Intersection and provided the following direction:

- (a) That staff be directed to undertake and review the intersection and road safety at the intersection of York Road and Newman Road, identify the appropriate road safety measures and report back on the feasibility of implementation measures;
- (b) That staff be directed to negotiate with the applicant of 574 Northcliffe Road to enter into a cost-share agreement to undertake a safety review for the impact of additional traffic and school buses resulting from the development application; and,
- (c) That staff be directed to liaise with the Ministry of Transportation to investigate the option to improve traffic operations and safety along York Road in the vicinity of Newman Road.

In July 2020, an application for a Niagara Escarpment Plan (NEP) Amendment by Columbia Northcliffe Campus Inc. for Lands Located at 574 Northcliffe Avenue was circulated to relevant agencies and the City of Hamilton. The applicant proposes to amend the NEP to revise a special policy that applies to 574 Northcliffe Avenue. The site-specific policy would allow the use of the former convent of the Sisters of St. Joseph as a private secondary school with a maximum of 1,000 students and 80 staff with an accessory gymnasium addition attached to the existing building.

On April 15, 2019, unrelated to the development of 574 Northcliffe, the MTO issued a Notice of Study Commencement for Proposed Intersection Improvements at Various Locations in the City of Hamilton and Halton Region Preliminary Design and Class Environmental Assessment. Five locations are being analysed as part of the study, one of which is Highway 6 at York Road West Ramp Terminal.

On November 16, 2020, Report PW20071/PED20196 respecting a Road Safety Review and Appropriate Measures at the York Road and Newman Road Intersection was placed on the agenda for Public Works Committee but was deferred to a future Public Works Committee meeting to allow staff the opportunity to meet with the Ward Councillor and review their concerns.

This Report has been updated to reflect direction provided at the November 16, 2020 Public Works Committee.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

N/A

RELEVANT CONSULTATION

The MTO was engaged with respect to the direction by Council to liaise with the MTO to investigate the option to improve traffic operations and safety along York Road. In addition, staff have participated in two technical meetings related to the Preliminary Design and Class Environmental Assessment for various intersections including Highway 6 at York Road West Ramp Terminal.

Staff have also had communications with the transportation consultant for Columbia College, IBI Group.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

York Road is classified as an arterial roadway with a rural cross section and has a posted speed limit of 60 km/h. Newman Road is a local rural roadway with a posted speed limit of 50 km/h. As shown in Appendix "A" attached to this Report PW20071(a)/PED20196(a), the neighbourhood is landlocked.

In 2019, TOM conducted a review of the intersection and the corridor of York Road. Based on existing conditions, it was determined that the intersection of York Road and Newman Road does not warrant the installation of a traffic signal (4% warranted). In a 24-hour period, 600 vehicles use Newman Road, while for the same 24-hour period, 11,000 vehicles use York Road. A review of the collision network screening rankings identified that this location has had one collision between 2014 and 2018. Overall the intersection ranks 1,875 out of 2,731 locations and does not identify a safety risk.

A review of the York Road corridor between Highway 6 and Old Guelph Road, identified that the 85th percentile speed (the speed at which 85 percent of the vehicles travel at or below) is between 67 km/h and 72 km/h. A review of the collision network screening rankings identified that this location has had a total of four collisions, all single motor vehicle collisions. Overall, this segment ranks 1,561 out of 2,731 locations and presents a minimal safety risk.

A warrant analysis based on traffic volumes was also undertaken to assess the need for a westbound left turn lane at York Road and Newman Road. The assessment shows that a left-turn lane is warranted on York Road in the westbound direction under both existing and future conditions.

Staff have previously identified the intersection of York Road and Old Guelph Road for the installation of a traffic signal (currently controlled by an all-way stop). The addition of the traffic control device will further enhance access to and from Newman Road by creating gaps in traffic for motorists.

Concurrently, Transportation Planning have been in communication with the transportation consultant IBI Group representing the owners of 574 Northcliffe Avenue and have received a Traffic Impact Study and Road Safety Study for a potential development for up to 1,000 students. Formal comments on this TIS and Road Safety Review will be provided through the regular development review process. The analysis indicates that with the addition of site traffic, the intersection of York Road and Newman Road will operate at acceptable levels of service assuming a stop-controlled configuration.

The Road Safety Report prepared as part of the development application also identified a number of counter measures that could address speeding and other safety concerns on York Road, not necessarily related to the development. These include:

- Install a flashing overhead beacon at the York Road and Newman Road intersection, which would flash amber for York Road and red from Newman Road;
- Trim foliage along the south side shoulder of York Road to improve sightlines and intersection visibility;
- Increased speed enforcement; and,
- Re-profiling the west leg of the York Road/Newman Road intersection to remove the dip in the road.

Some of these may be achieved through planned improvements on York Road including the construction of a roundabout at the Highway 6 off-ramp and the installation of a new signal at Old Guelph Road. A final assessment of improvements resulting from the development at 574 Northcliffe Road will be completed as part of the development review process.

As noted previously, the MTO is currently in the process of investigating interchange upgrades at the York Road and Highway 6 ramp terminal. Through this process, the MTO is proposing a roundabout at the Highway 6 off ramp. TOM provided copies of the Columbia College traffic impact study to the MTO.

Evaluation by the MTO determined that it would be appropriate to install a westbound left turn lane to Newman Road. In addition, it has been mutually identified that widening of York Road to facilitate cycling infrastructure would be needed. The MTO is working on design plans to facilitate the changes to York Road and further coordination will continue.

ALTERNATIVES FOR CONSIDERATION

Public Works Committee and/or Council could provide direction to install an all-way stop or traffic signals at the intersection of York Road and Newman Road. However, based on staff evaluation of traffic volume patterns, this is not recommended. This would further require MTO approval due to the potential operating impacts of the ramp terminals.

The installation of unwarranted traffic controls can cause driver frustration, stopping compliance, and create an operational and safety concern. If Council were to direct staff to implement traffic control, the cost for implementing an all-way stop would be approximately \$3,000 or \$200,000 for a traffic signal.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Healthy and Safe Communities

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.

APPENDICES AND SCHEDULES ATTACHED

Appendix “A” to Report PW20071(a)/PED20196(a) – York Road and Newman Road Area Map