

Item:



Committee of the Whole Report

DATE: Monday, September 17, 2018

WARD(S): 4

**TITLE: ALL-WAY STOP CONTROL REVIEW
INTERCHANGE WAY AND COMMERCE STREET (SOUTH)**

FROM:

Stephen Collins, Deputy City Manager, Public Works

Jason Schmidt-Shoukri, Deputy City Manager, Planning and Growth Management

ACTION: DECISION

Purpose

This report seeks Council approval to implement an all-way stop control at the intersection of Interchange Way and Commerce Street (south) to improve traffic operations and facilitate pedestrian and vehicle traffic.

Recommendations

1. That Council approve the implementation of an all-way stop control at the intersection of Interchange Way and Commerce Street (south);
2. That a By-law be enacted to amend By-law 284-94, the Consolidated Traffic By-law, to remove the temporary signals at the intersection of Interchange Way and Commerce Street (south)/Temporary Toromont access driveway;
3. That a By-law be enacted to amend By-law 284-94, the Consolidated Traffic By-law to add an all-way stop control at the intersection of Interchange Way and Commerce Street (south); and
4. That the City Clerk forward a copy of this report to York Regional Police.

Report Highlights

- Temporary traffic signals were installed in 2011 at the intersection of Interchange Way and the Commerce Street (south)/temporary Toromont access driveway.
- With the completion of the VMC subway station in December 2017, the temporary Toromont access driveway on Interchange Way is no longer needed and the temporary traffic signals at the intersection of Interchange Way and the Commerce Street (south)/Temporary Toromont access driveway have been removed.
- Traffic studies were undertaken and the existing traffic volumes at the subject intersection satisfy 99.5% of the Provincial Warrant for All-way Stop Controls.
- All-way Stop Controls would benefit both vehicular and pedestrian movements in the area.

Background

Temporary traffic signals were installed in 2011 at the intersection of Interchange Way and the Commerce Street (South)/temporary Toromont access driveway to facilitate the construction of the Toronto-York Spadina Subway Extension.

To help facilitate construction of the Toronto-York Spadina Subway Extension, temporary traffic signals were installed in 2011 at the intersection of Interchange Way and the Commerce Street (south)/temporary Toromont access driveway.

With the completion of the subway station, the temporary Toromont access driveway on Interchange Way is no longer needed. Traffic studies were conducted to identify the suitable traffic control device given the removal of the temporary signals and the restoration of the temporary Toromont access driveway.

Previous Reports/Authority

City of Vaughan Committee of the Whole Report – June 14, 2011:

http://meetingarchives.v Vaughan.ca/committee_2011/pdf/CWA0614-Addendum_40.pdf

Analysis and Options

With the completion of the VMC subway station, the temporary access on Interchange Way will be closed and restored.

Interchange Way is a two-lane, L-shaped major collector roadway with a 26 to 30 metre right-of-way and a 14 metre pavement width. Commerce Street (south) is a two-lane minor collector roadway with a 26 metre right-of-way and a 10 metre pavement width.

The intersection of Interchange Way and Commerce Street (south) was a three-legged intersection with all-way stop control prior to the temporary signal installation. A map of the area is shown in Attachment No. 1.

With the completion of the VMC subway station in December 2017, the temporary access on Interchange Way is no longer required as the Toromont access on Highway 7 is fully restored and operational. The temporary access on Interchange Way will be closed and the boulevard will be restored.

An All-way Stop Control is recommended at the intersection of Interchange Way and Commerce Street (south) to improve traffic operations and facilitate pedestrian and vehicle traffic.

A turning movement count was conducted on November 29, 2017 at the intersection of Interchange Way and Commerce Street (south). The study was conducted during the peak traffic periods of 7:00 a.m. to 9:00 a.m., 11:00 a.m. to 2:00 p.m. and 3:00 p.m. to 6:00 p.m. The study results indicated that the traffic volume satisfied 30% of the Provincial All-way Stop Warrant requirement.

In the last six months, there has been a significant increase in pedestrian and vehicular volumes because of transit users from the VMC subway opening and new land development in the area. As a result, an updated turning movement count was conducted on July 10, 2018 at the intersection of Interchange Way and Commerce Street (south) after the temporary Toromont access driveway on Interchange Way was closed. The studies were conducted during the peak traffic periods of 7:00 a.m. to 9:00 a.m., 11:00 a.m. to 2:00 p.m. and 3:00 p.m. to 6:00 p.m.

The collision records and sightlines at the approaches to the intersection were also assessed. The data collected was compared to the Provincial Warrant for All-way Stop Controls with the following results:

Interchange Way and Commerce Street (South) Traffic Review:

	November 2017	July 2018
Warrant 1 Minimum Vehicular Volumes Warranted	30%	99.5%
Warrant 2 Accident Hazard Warranted	25%	25%
Warrant 3 Sight Restriction Warranted	0%	0%

All-way stop controls are recommended when one of the above warrants meets 100 per cent. Based on the results above, the existing traffic volumes satisfy 99.5% of the warrant requirement. The intersection is currently not warranted for traffic control signals.

There have been no reported collisions at this intersection in 2016 and 2017 according to the latest collision data available from York Regional Police.

There are no sightline restrictions at this intersection. Both streets are at level grade and intersect at 90 degrees. No sight visibility concerns were noted.

Given the intersection's proximity to the TTC subway and future developments in the area, it is anticipated that the warrant will meet minimum requirements in the very near future. Therefore, it will be beneficial to proactively install the all-way stop control now as part of the TTC restoration works especially considering the intersection was previously an All Way Stop Control prior to the signalization in 2011.

The proposed all-way stop controls would benefit both vehicular and pedestrian movements in the area.

The intersection is currently not warranted for traffic control signals.

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

The recommendation in this report is consistent with the strategic priorities related to the Term of Council Service Excellence Strategy Map (2014-2018):

- Improve municipal network;
- Continue to develop transit, cycling and pedestrian options to get around the City; and
- Continue to ensure the safety and well-being of citizens

Financial Impact

The removal of the temporary traffic control signals, installation of the all-way stop signs and modification of the pavement markings were carried out in conjunction with the TYSSE project, which committed to restore the area at no cost to the City.

The on-going cost to maintain the signs and pavement markings (stop bars) is estimated to be \$200 per annum and will be incorporated in future year Operating Budgets.

Broader Regional Impacts/Considerations

Not Applicable.

Conclusion

It is recommended that an all-way stop control be implemented at the intersection of Interchange Way and Commerce Street (south) as the existing traffic volume satisfies 99.5% of the Provincial Warrant for all-way stop controls and the warrant requirement is expected to be met in the very near future. The implementation of an all-way stop control at this location would benefit both vehicular and pedestrian movements in the area.

For more information, please contact:

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Andrew Pearce, Director of Development Engineering or

Margie Chung, Manager of Traffic Engineering.

Attachments

1. Location Map

Prepared by

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