

The Corporation of the City of Kawartha Lakes

Council Report

Report Number ENG2017-014

Date: August 22, 2017
Time: 2:00 p.m.
Place: Council Chambers

Ward Community Identifier: 9, 11

Subject: Request for Traffic Control – Durham Street West and Adelaide Street South, Albert Street North and Pottinger Street

Author Name and Title: Joseph Kelly, Senior Engineering Tech

Recommendation(s):

RESOLVED THAT Report ENG2017-014 **Request for Traffic Control Durham Street West and Adelaide Street South, Albert Street North and Pottinger Street**, be received;

THAT an all-way stop be installed at the intersection of Durham Street West and Adelaide Street South;

THAT an all-way stop be installed at the intersection of Albert Street North and Pottinger Street;

THAT the necessary by-laws for the above recommendations be forwarded to Council for adoption;

THAT the Mayor and Clerk be authorized to execute any documents and agreements required by the approval of this application/agreement/decision.

Department Head:_____

Financial/Legal/HR/Other:_____

Chief Administrative Officer:_____

Background:

Staff have received multiple requests for the installation of all-way stops and concerns for speeds and the general safety at the intersections of Durham Street West and Adelaide Street South and Albert Street North and Pottinger Street.

This report addresses those concerns.

Rationale:

The Ontario Traffic Manual (OTM) has methods to determine if an all-way stop is warranted and does not recommend that stop controls be used as a speed control or traffic calming device.

The purpose of a stop sign is to control right-of-way conflicts. On two relatively equal roadways having similar traffic volume demand and operating characteristics an all-way stop control is an appropriate method to control right-of-way conflicts.

Staff performed all-way stop warrants and site investigations to determine if the installation of all-way stops is an appropriate action. As per the OTM, speed control was not a determining factor.

The intersections did not meet the minimum total volume warrants for all-way stops. It was found that cross traffic had roughly equal volumes at the Durham Street West, Adelaide Street South intersection (approximately 52/48 north-south/east-west split). The cross volume changes could be explained by recent development and changes in traffic patterns. In the case of the Albert Street/Pottinger Street intersection, the right of way was granted to the approaches which had only 44% of the traffic volume (Pottinger Street). Traffic count results can be seen in Appendix A and B. Minimum sightline requirements are met.

Motorists drive by feel it is clear to them when intersections feel "wrong". When equal volume and same class roads only have one stop control, or when the major road has the only stop control, driver confusion can magnify. Staff witnessed multiple instances of vehicles stopping at non-stop controlled approaches, waving cars through, non-compliance with the stops and vehicles creeping into the intersection instead of stopping. These behaviors reduce the credibility of the current stop controls and increase the potential for vehicle conflict. Although these intersections do not experience enough volume to trigger the warrant, it would be using good engineering judgment and in keeping with best practices to install all-way stops at equal volume, same class roads which generate high instances of driver confusion.

As a result of the justification review carried out by staff, it is recommended that all-way stops be installed at the intersections of Durham Street West and Adelaide Street South, and Albert Street North and Pottinger Street.

Other Alternatives Considered:

Previous complaints regarding Durham Street West and Adelaide Street South resulted in the installation of oversized stop signs on Adelaide Street and a flashing overhead beacon to bring awareness to the stop. This has been effective in reducing collision rates at the intersection, but it is not recommended that the intersection remain as is due to changing traffic patterns.

The stop control at Pottinger Street could be moved to Albert Street instead of installing an all-way stop. However, the volume split is still close enough to 50/50 that this wouldn't solve all the problems regarding driver confusion.

Financial/Operation Impacts:

Cost of signs to bring the By-law into effect.

Four new stop signs

Four temporary stop ahead warning signs with "new" sign above (should be in inventory from previous all-way stop installations)

Eight "ALL WAY" tabs

Plus Installation

$\$450 * 12 = \5400

Relationship of Recommendation(s) To The 2016-2019 Strategic Plan:

The City's Strategic Plan outlines Council's Vision of a Vibrant and Growing Economy, Quality of Life and a Healthy Environment.

Providing life safety and protection is a priority objective of the City.

Consultations:

No Consultations were mentioned

Attachments:

Appendix A – Durham St. and Adelaide St. Traffic Count Results



ENG2017-014-
Appendix A.pdf

Appendix B – Albert St. and Pottinger St. Traffic Count Results



ENG2017-04-Append
ix B.pdf

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Department File: Engineering