



Council Report

Report Number: ENG2022-042

Meeting Date: December 13, 2022

Title: Request for All-way Stop – Sussex Street North and Wellington Street - Lindsay

Description: Request for Traffic Control

Author and Title: Joseph Kelly, Traffic Management Supervisor

Recommendation(s):

Report **ENG2022-042 Request for All-way Stop – Sussex Street North and Wellington Street - Lindsay** be received;

THAT an all-way stop be installed at the intersection of Sussex Street North and Wellington 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 decision.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

Staff has received multiple requests from the public and the former Ward Councillor to investigate the safety concerns at the intersection of Wellington Street and Sussex Street North.

This report address those concerns.

Both Wellington Street and Sussex Street North are classified as local roads, however volumes indicate that drivers are using these streets as collectors/arterials, getting from the bridge on Wellington/Lindsay Streets to Albert Street in the case of Wellington Street, and for north/south connection from Kent Street West to Colborne Street West in the case of Sussex Street North. The school zone for Alexandra Public School is located approximately 230m north of the intersection. It is a major traffic generator at peak hours and students utilize this intersection at arrival and dismissal times.

A map of the intersection showing annual average daily traffic (AADT) can be seen in Appendix A.

Staff performed a traffic turning movement count (Appendix B) for an all-way stop warrant (Appendix C) to determine if installing an all-way stop is an appropriate action.

Rationale:

All-way Stop Warrants:

The Ontario Traffic Manual (OTM) has two methods to determine if an all-way stop is warranted:

1) All-way Stop Minimum Volume Warrant (Local)

The OTM suggests that an All-way stop control may be considered on local roads where conditions are met for all of the following:

- a) Total hourly vehicular volume on all approaches to exceed 200 vehicles for each of the highest 4 hours (this condition is met at this intersection); and
- b) Combined vehicle and pedestrian volume for minor street to exceed 75 units for each hour in the same four-hour period (this condition is met at this intersection); and
- c) Volume split does not exceed 70/30; that is the minor street must not be less than 30% of the total volume entering the intersection (this condition is not met, with an 83% sectional score).

The All-way stop minimum volume warrant is not met.

2) All-way Stop Collision Warrant

An All-way stop control may be considered on an intersection with a high accident frequency. For the purpose of this warrant, a high accident frequency is an average of three collisions per year over a three-year period.

The intersection has a reported collision average of 1 collision per year over the latest three years of available collision data. Therefore, the All-way Stop Collision Warrant is not met.

Engineering Judgement

Typically, all three volume criteria (as outlined in Section 1 of this report) must be met to consider an all-way stop justified, however, with two of the three criteria being met, and the third being 83% met, it would be using good engineering judgment to review if any other conditions exist that would increase collision potential.

Of particular concern is the extreme volume split. 70% of vehicles enter the intersection from a Wellington Street approach (that is the approaches that have stop controls). This creates driver frustration and confusion on all approaches resulting in increased conflict potential. The heavy utilization of school age pedestrians compounds this conflict.

It would therefore be using good engineering judgment to recommend an all-way stop at this intersection.

As a result of the justification review carried out by staff, it is recommended that an All-way stop be installed at the intersection of Sussex Street North and Wellington Street.

Other Alternatives Considered:

N/A

Alignment to Strategic Priorities

Providing life safety and protection, is a priority objective of the City under the Council Adopted Strategic Plan Goal of An Exceptional Quality of Life.

Financial/Operation Impacts:

Cost of installing new signs and painting stop bar, approximately \$2000

Consultations:

N/A

Attachments:

Appendix A – Key Map



Foxit PhantomPDF
PDF Document

Appendix B – Turning Movement Count Results



Foxit PhantomPDF
PDF Document

Appendix C – All-way Stop Warrant Summary



Foxit PhantomPDF
PDF Document

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Department Head: Juan Rojas, Director of Engineering & Corporate Assets

Department File: Engineering and Corporate Assets