Subject: Removal of All-Way Stop Control, Intersection of Regional Road 89 (Glendale Avenue) at Bessey Street, City of St. Catharines

Report to: Public Works Committee

Report date: Tuesday, March 10, 2020

Recommendations

1. That the removal of the all-way stop control for the eastbound and westbound traffic at the intersection of Regional Road 89 (Glendale Avenue) and Bessey Street, in the City of St. Catharines BE APPROVED; and

2. That the necessary by-law BE PREPARED and PRESENTED to Regional Council for consideration.

Key Facts

- The purpose of this report is to seek Council’s approval in the removal of the all-way stop control at the intersection of Glendale Avenue and Bessey Street.
- The all-way stop control is not justified, based on the warrants of the Ontario Traffic Manual Book 5 Regulatory Signs.
- Staff have received a formal request to consider removing the all-way stop control.
- Regional staff have had discussions with the City of St. Catharines staff, who are supportive of the recommendation.

Financial Considerations

The costs to introduce the recommended changes are minimal and will be accommodated within the 2020 Transportation Services operating budget.

Analysis

In 2006, Regional Road 89 (Glendale Avenue) was reconstructed, which included the realignment of Glendale Avenue from Mountain Street to Merritt Street and from Merritt Street to the CN Railway. The realignment of Glendale Avenue resulted in a new signalized 4-legged intersection with Merritt Street allowing for a straight through east/west movement. Prior to the reconstruction, a Class Environmental Assessment was undertaken in 2003 and 2004. The EA process recommended the removal of the
east and west stop controls on Glendale Avenue at Bessey Street. PWA 78-2007 report recommending the approval of the all-way stop control was not adopted by Council in 2007, as the residents presented a petition requesting a controlled crosswalk if the stop controls were removed for the eastbound and westbound direction. At that time, a controlled pedestrian crossing was not warranted and not recommended.

Staff have received a formal request from residents through a Regional Councillor requesting that consideration be given for the removal of the all-way stop control at the intersection of Glendale Avenue and Bessey Street. Staff followed the procedures and warrants of Ontario Traffic Manual Book 5-Regulatory Signs when determining if an all-way stop control is justified. The collected data traffic volumes and collisions were applied to the warrants and results indicate that an all-way stop control is not warranted at this location. The volume splits between Glendale (major road) and Bessey (minor road) also exceed the maximum threshold of 75/25%. This results in major queue lengths for both the eastbound and westbound direction. It should also be noted that this intersection is only 215 metres away from the signalized intersection of Glendale Avenue and Merritt Street. Staff have observed as many as 20+ vehicles in queue at the stop control in either the eastbound or westbound direction and none at the stop controls for the northbound or southbound direction. This also leads to a metering affect for westbound vehicles leaving the intersection creating inadequate gaps for eastbound left turning vehicles at the signalized intersection of Glendale Avenue and Merritt Street. The queue lengths in the westbound direction get much worse when vehicles are stopped for the CN rail crossing which is further to the west.

The number of pedestrians recorded crossing Glendale Avenue during the study was 11 in an eight-hour period. This number is below the threshold required for staff to recommend the installation of a Pedestrian Crossover. If the all-way stop is removed, staff can continue to monitor the pedestrian activity and recommend the installation of a Pedestrian Crossover if warranted.

During the site visit with City of St. Catharines staff, it was concluded that the removal of the eastbound and westbound stop controls could have a positive effect in reducing any cut through traffic presently using Bessey Street.

Based on the warrants for an all-way stop control not being justified and the major delays for eastbound and westbound motorists, staff are recommending that the all-way stop control be removed. If approved, staff will follow the guidelines and procedures of the Ontario Traffic Manual for the removal of an all-way stop control.
Alternatives Reviewed

A do nothing scenario was considered, however, it does not address the congestion concerns and the queue lengths.

Relationship to Council Strategic Priorities

The removal of the all-way stop control will provide efficient movement of people and goods within the Niagara Region transportation system that currently is experiencing congestion and delays.

A planned and implemented efficient transportation system supports the Council’s 2019-2022 Strategic Priority - Responsible Growth and Infrastructure Planning:

- Facilitating Movement of People and Goods

Other Pertinent Reports

PWA 78-2007, May 16, 2007, Removal of All-Way Stop at the Intersection of Regional Road 89 (Glendale Avenue) and Bessey Street, St.Catharines
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Appendices

Appendix 1  Proposed Stop Control Adjustment  5