

DATE: September 19, 2022

REPORT NO: PW-14-2022

SUBJECT: **Port Davidson Rd and Sixteen Rd Intersection Review**

CONTACT: Jennifer Bernard, C.E.T., Coordinator of Engineering Services
Mike DiPaola, P.Eng., Director of Public Works and Recreation

OVERVIEW:

- A request was received to review the intersection of Port Davidson Rd and Sixteen Rd for an all-way stop control.
- Existing traffic data indicates the intersection does not meet the criteria of Ontario Traffic Manual: Book 5 for an all-way stop.
- Staff have implemented a number of changes on Sixteen Rd to improve driver awareness at the intersection.
- Staff will complete new traffic counts on both roads and report back to Council on the outcome of the intersection review.
- The intersection of Caistor Centre Rd and Concession 3 Rd will also be reviewed for an all-way stop control.

RECOMMENDATION:

That, Information Report PW-14-2022, re: "Port Davidson Rd and Sixteen Rd Intersection Review", dated September 19, 2022, be received for information.

ALIGNMENT TO STRATEGIC PLAN:

Theme #1

- **Strong Transportation Connections** – West Lincoln has transportation infrastructure that is safe for motorists, well-maintained and connected within the community.

BACKGROUND:

All-Way Stop Controls

The Ontario Traffic Manual: Book 5, outlines conditions that must be met for intersections to operate under an all-way stop control, for Collector Roads and Rural Arterial Roads:

- a) The total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day; and,

- b) The combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR
The combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with an average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight-hour period; and,
- c) The 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) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway.

Where an all-way stop warrant is requested, staff will collect traffic data to determine if the intersection meets these conditions for an all-way stop.

Port Davidson Rd and Sixteen Rd Intersection

In 2020, Public Works received a speed limit reduction request for Port Davidson Rd between Sixteen Rd and Townline Rd. Wood Environment & Infrastructure Solutions was hired to review this request and develop a Speed Limit Review Policy for the Township for similar requests in the future. It was determined that the majority of traffic on Port Davidson Rd is travelling within the appropriate range of speed for the road design and classification, therefore no changes to the speed limit were warranted.

To improve driver awareness, Public Works installed warning signs on the east and west sides of Sixteen Rd within 100m of the intersection with Port Davidson Rd to inform drivers that stop signs are ahead and that traffic on Port Davidson Rd is not under stop sign control. The stop signs on Sixteen Rd were outfitted with flashing red lights and chevrons, stop bars were painted at the appropriate distance from Port Davidson Rd.

CURRENT SITUATION:

A request to review the intersection for an all-way stop control was received by Public Works. Since the speed limit review was completed in 2020, the traffic count data is considered to still be accurate. The last traffic count data available for Sixteen Rd is from 2016 for the section between Port Davidson Rd and Tober Rd. Using this data, the intersection does not meet the criteria from the Ontario Traffic Manual: Book 5, for the intersection to be changed to an all-way stop. In consideration of the age of the traffic data for Sixteen Rd, staff will be undertaking new traffic counts on Sixteen Rd between Tober Rd and Shurie Rd as well as on Port Davidson Rd. Staff will also review the sightlines at the intersection and any available collision data. A report will be brought back to Council with any recommendations for the intersection.

A similar request was received to review the intersection of Caistor Centre Rd and Concession 3 Rd for an all-way stop control due to the alignment of the intersection. Staff will complete a traffic count and review of this intersection and report back to Council with the results.

FINANCIAL IMPLICATIONS:

Traffic counts and intersection reviews will be completed by Public Works staff. Any recommendations for improvements will be brought to Council at a future date.

INTER-DEPARTMENTAL COMMENTS:

This Report was reviewed by the CAO and Clerks office.

CONCLUSION:

Public Works staff will review the intersections of Port Davidson Rd and Sixteen Rd and Caistor Centre Rd and Concession 3 Rd and report back to Council with any recommendations for improvements to the intersections.

ATTACHMENTS:

Appendix A – Key Plan

Prepared by:



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Approved by:



Beverly Hendry
CAO

Submitted by:



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