

**Date:** Wednesday, April 9, 2025

**Meeting Type: Committee of the Whole**

**From: Kevin Verkindt, Manager, Engineering and Infrastructure**

**Subject: Speed Limit Review – Concession 24 and Zion Church Road**

**Report#:DEV2025-035**

This document and its attachments are public and available in an accessible format upon request.

## **Recommendation**

THAT Council receive Staff Report DEV2025-035 entitled “Speed Limit Review – Concession 24 and Zion Church Road”;

AND THAT the speed limit on Concession 24, from Zion Church Road to approximately 1345 m east of Side Road 20 / Gleason Lake Road be reduced to 60 km/h from the existing 80 km/h.

AND THAT the speed limit on Zion Church Road, from Grey Road 1 to Concession Road 21 be reduced to 60 km/h from the existing 80 km/h.

AND THAT a by-law to amend the speed limits be presented at the April 16, 2025 Council meeting.

## **Background**

In the Summer of 2024, Staff received calls and emails from residents on Zion Church Road and Concession 24, requesting that the speed limit be reviewed and reduced to lower speeds to match with other connecting rural local roads (i.e. Grey Road 1, Oxenden and Concession 24 at Lake Charles).

Staff conducted a review on the existing speed limit of 80 km/h on Zion Church Road from Grey Road 1 to Concession 21 and Concession 24 from Zion Church Road to

approximately 1345 m east of Side Road 20 / Gleason Lake Road (see attachment 1) based on the Ontario Ministry of Transportation Guidelines and Transportation Association of Canada's Guidelines, when made available.

Concession 24 is a local rural surface treated road. The existing speed conditions are unsigned, which automatically defaults to 80 km/h as per the *Highway Traffic Act*.

The proposed reduction in speed limit on Concession 24 from the existing 80 km/h to 60 km/h is a necessary safety measure, particularly given the unique characteristics of the road. With an Average Daily Traffic (ADT) count of approximately 600 vehicles and a highest 85th percentile speed of around 95 km/h (see attachment 2), the current speed limit is not aligned with the road's needs. The poor vertical and horizontal sightlines further increase the potential for hazards, especially as the road accommodates around 41 residential driveways, multiple businesses, and a cemetery. The reduced speed limit of 60 km/h would enhance safety for both drivers and residents, making it more appropriate for the current conditions. Additionally, this proposed speed limit would be consistent with the existing 60 km/h limit at nearby Lake Charles, ensuring a more uniform traffic flow and reducing speed variations in the area.

Zion Church Road is a local rural road surfaced by gravel from Concession 21 to Concession 24. The remaining section of Zion Church Road from Grey Road 1 to Concession 24 is surface treated. The existing speed conditions are unsigned, which automatically default to 80 km/h as per the *Highway Traffic Act*.

The proposed reduction of the speed limit on Zion Church Road is a step in improving road safety. With an ADT count of approximately 666 vehicles and an 85th percentile speed of around 79 km/h (see attachment 2), the current speed limit does not reflect the road's geometric conditions. Poor horizontal sightlines further exacerbate the potential for unsafe driving, as drivers may not have sufficient visibility to respond to changes in the road or potential hazards. Lowering the speed limit to 60 km/h would better match the road's design and traffic conditions. Further the reduction would align with surrounding local roads, such as Concession 21 and Grey Road 1 through the community of Oxenden, signed as 60 km/h.

## **Analysis**

The road section on Concession 24 from Zion Church Road to approximately 1345 m east of Side Road 20 / Gleason Lake Road and Zion Church Road from Grey Road 1 to Concession Road 21 (attachment 1) speed limit defaults to 80 km/h, per the *Highway Traffic Act*, 1990, as posted.

The major function of a roadway is to provide efficient movement of people and goods; therefore, the speed limits should be maintained considering public safety and risk management. When determining an appropriate speed limit, consistency is important,

therefore frequent alterations in the posted speed limit along a roadway are not recommended.

Staff examined relevant legislation and guidelines when assessing the speed limit for the road segments. Additionally, the following physical and operational characteristics of the road were thoroughly reviewed:

- Geometry (Horizontal)
- Geometry (Vertical)
- Average Lane Width
- Roadside Hazards
- Pedestrian Exposure
- Cyclist Exposure
- Pavement Surface
- Number of Intersections with Public Roads
- Number of Intersections with Private Access Driveways
- On-street Parking

In addition to the physical and operational characteristics of the road, the analysis uses a starting speed value, which is based on the road classification and land use (urban or rural). Since Concession 24 and Zion Church Road is considered a local road and in a rural area, a starting speed value of 60 km/h was used.

## **Financial Impact**

The Ministry of Transportation Guidelines, specifically Book 5 - Regulatory Signs and the Regulation of Ontario (R.R.O.) 1990, Reg. 615: Signs under the *Highway Traffic Act*, states the maximum allowable spacing for speed regulatory signs is 600 meters, with a recommended spacing of 500 meters. These signs must be installed on both traveled portions of the road.

The speed reduction section on Concession 24 spans approximately 5 kilometers, requiring the installation of around 18 new regulatory signs and an approximate cost of \$2,250.00.

Similarly, the speed reduction section on Zion Church Road is approximately 3 kilometers long, necessitating the installation of approximately 10 new regulatory signs and an approximate cost of \$1250.00.

The implementation of new speed control signs are to be drawn from the Operations Base Operating Budget.

## **Strategic Lenses**

### **Diversity, Equity, Inclusion, and Belonging**

A speed limit reduction promotes Diversity, Equity, Inclusion, and Belonging by creating a safer environment for all road users, particularly vulnerable groups such as children, elderly individuals, ensuring everyone can travel with greater security and confidence.

### **Truth and Reconciliation**

No positive impact.

### **Climate Change**

No positive impact

## **Conclusion**

With the review of Concession 24 and Zion Church Road, in conjunction with phone calls and emails from the residents to reduce the speed limits.

Staff recommend that the speed limits on Concession 24 from Zion Church Road to approximately 1345 m east of Side Road 20 / Gleason Lake Road be reduced from the current posted speed limit of 80 km/h to 60 km/h.

Also, Staff recommend Zion Church Road from Grey Road 1 to Concession Road 21 be reduced from the current posted speed limit of 80 km/h to 60 km/h.

It is anticipated that approximately 28 new regulatory speed signages will be required based on the recommended spacing in the Ontario Traffic Manual Book 5 and the R.R.O Reg 615: Signs under the *Highway Traffic Act*.

Should Committee endorse the reduction, and the recommendations contained herein, a by-law, to amend the speed limit will be presented for enactment at the April 16, 2025, meeting of Council.

Respectfully Submitted:

Kevin Verkindt, Manager, Engineering and Infrastructure

### Report Approval Details

Document Title:	Speed Limit Review - Concession 24 and Zion Church Road.docx
Attachments:	<ul style="list-style-type: none"><li>- Attachment 1 - Map of Proposed Speed Reduction.pdf</li><li>- Attachment 2 - Traffic Count Data.pdf</li></ul>
Final Approval Date:	Mar 27, 2025

This report and all of its attachments were approved and signed as outlined below:

Michael Benner, Director of Development and Infrastructure

Niall Loble, Chief Administrative Officer