

Traffic Study – Labelle Street and Noel Street, Sudbury

Presented To:	Operations Committee
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Type:	Correspondence for Information Only
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Report Summary

This report provides information regarding a request to undertake a traffic study at the intersection of Labelle and Noel Streets in response to resolution CC2023-34, submitted by Councillor Lapierre at the February 7, 2023 City Council meeting.

Relationship to the Strategic Plan, Health Impact Assessment and Community Energy & Emissions Plan (CEEP)

This report refers to operational matters.

Financial Implications

There are no financial implications associated with this report.

Background

On February 7, 2023, City Council resolution OP2023-26 was passed stating that;

WHEREAS the intersection at Labelle and Noel Streets in Hanmer is designated as an intersection where a yield sign is to be erected facing oncoming traffic travelling in the direction of travel west on Labelle Street;

AND WHEREAS local residents have identified that exiting their driveways is challenging at times because drivers often do not adhere to the yield sign; AND WHEREAS residents who live in the area of the intersection have requested that the yield sign be replaced with a stop sign;

THEREFORE BE IT RESOLVED that the City of Greater Sudbury directs staff to undertake a traffic study at the intersection of Labelle and Noel Streets to determine whether a stop sign is warranted and that the results of that study be presented to the Operations Committee during the third quarter of 2023.

The intersection of Labelle Street and Noel Street is located in Hanmer as shown in Figure 1.

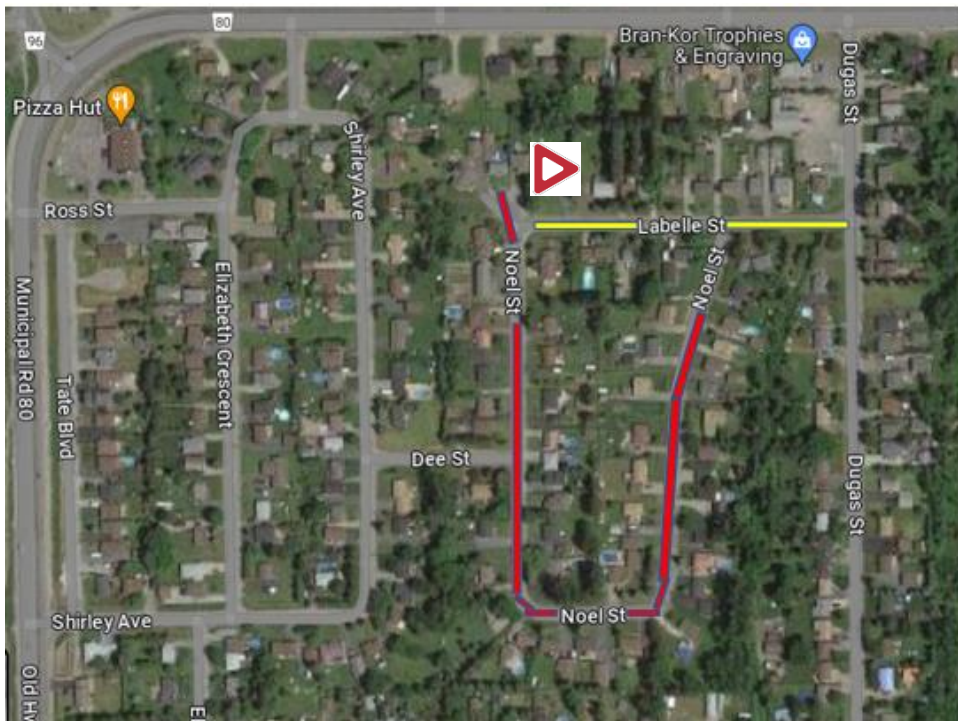


Figure 1: Intersection of Labelle Street and Noel Street

The intersection is a T intersection controlled by a yield sign on Labelle Street. Both Labelle Street and Noel Street are local roads with surface widths of 6.7 metres and have rural cross sections with ditches. The speed limit on both roads have been reduced to 40 km/h as part of the Gateway Speed Limit pilot project.

In response to the resident's concerns in regards when exiting their driveways, under the Highway Traffic Act drivers entering a public road from a private road or driveway are required to yield the right of way to all traffic approaching on the public road. Therefore motorists travelling on Labelle Street and Noel Street have the right of way and resident's attempting to exit their driveway are required to wait until there is a gap in traffic and it is safe to enter the road.

Analysis

A yield sign is an effective control device to use when traffic volumes are low, minimum sight distances are available and stopping on the minor road is not always required. A stop sign control may be warranted when the criteria for a yield sign aren't met.

Transportation and Innovation Support staff conducted a traffic study at the intersection looking at traffic volumes, vehicle speeds, sight distances and collision history. Both Labelle Street and Noel Street have an Annual Average Daily Traffic (AADT) count of 132 vehicles and an 85th percentile speed of 42 km/h. The 85th percentile is the speed at or below which 85 percent of the drivers are traveling. There is no history of collisions at the intersection or the road segments that approach the intersection from Labelle and Noel Streets. A sight distance analysis shows sufficient distances are achieved based on the minimum requirements as per the Transportation Association of Canada Geometric Design Guide for Canadian Roads. The requirements are based on the design speed of the road which is 10 km/h above the speed limit. Currently for a speed limit of 40 km/h vehicles approaching the yield sign on Labelle Street the minimum distance required is 25 metres while the minimum distance required on Noel Street is 65 metres. If the Gateway Speed Limit pilot project isn't continued and the speed limit is returned to 50 km/h, the sight distance requirements are increased to 85 metres for Noel Street. Under both conditions the sight distance requirements are met as the current sight distance for Labelle Street is 60 metres (see Figure 3 below) and the sight distance for Noel Street is 154 metres (see Figure 2 below).



Figure 2: Intersection of Labelle Street and Noel Street looking south



Figure 3: Westbound approach at Intersection of Labelle Street and Noel Street

Conclusion

Based on the results of the traffic study a yield sign is appropriate according to established guidelines for traffic control at the intersection of Labelle Street and Noel Street. Both Labelle Street and Noel Street have low traffic volumes, low operating speeds and the sight distances exceed the minimum requirements. Lastly, under the Highway Traffic Act vehicles exiting from a private driveway unto a public road need to yield to vehicles on the road.

Resources Cited

City of Greater Sudbury, City Council Agenda

Accessed online: <https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=48662>

Ontario Highway Traffic Act,

Accessed online: <https://www.ontario.ca/laws/statute/90h08>