

Committee of the Whole Report

DATE: Tuesday, April 02, 2019

WARD(S): 4

**TITLE: ALL-WAY STOP CONTROL REVIEW AT CARRIER CRESCENT
AND OBERFRICK AVENUE**

FROM:

Zoran Postic, Interim Deputy City Manager, Public Works

ACTION: DECISION

Purpose

This report seeks Council approval to implement an all-way stop control at the intersection of Carrier Crescent and Oberfrick Avenue to improve traffic operations.

Report Highlights

- A traffic study was undertaken, and the existing traffic volumes at the subject intersection exceed the Provincial Warrant for all-way stop controls.
- All-way stop controls would benefit vehicular and pedestrian movements in the area.
- It is recommended that an all-way stop control be implemented at the subject intersection.

Recommendations

1. That the implementation of an all-way stop control at the intersection of Carrier Crescent and Oberfrick Avenue be approved;
2. That a By-law be enacted to amend By-law 284-94, the Consolidated Traffic By-law, to add an all-way stop control at the intersection of Carrier Crescent and Oberfrick Avenue; and
3. That the City Clerk forward a copy of this report to York Regional Police.

Background

A review of traffic operations was conducted at the intersection of Carrier Crescent and Oberfrick Avenue to assess the need for additional traffic control measures.

Carrier Crescent and Oberfrick Avenue form a four-legged intersection, with two travel lanes per leg (one lane per direction). Both roadways are designated as local roadways with a pavement width of 8.0 metres, and right-of-way width of 17.5 metres.

Carrier Crescent is oriented east-west and does not currently require vehicles to stop at the intersection with Oberfrick Avenue. Vehicles traveling on Oberfrick Avenue, which is oriented north-south, are required to stop at Carrier Crescent. There are sidewalks along the south side of Carrier Crescent, and along the east side of Oberfrick Avenue.

Staff have noted that there are several pedestrian generators/destinations located within this community, including Dr. Roberta Bondar Public School (on the northeast corner of Grand Trunk Avenue and Sir Sanford Fleming Way) and St. Cecilia Catholic Elementary School (on the southeast corner of Peter Rupert Avenue and Golden Forest Road).

Previous Reports/Authority

[Consolidated Traffic By-Law 284-94](#)

Analysis and Options

An all-way stop control is recommended at the intersection of Carrier Crescent and Oberfrick Avenue to improve traffic operations and facilitate pedestrian and vehicle traffic.

The City's all-way stop control warrant analysis takes into consideration the minimum vehicular volumes required, accident hazards, and sight restrictions at the intersection. This warrant analysis is generally based on the thresholds established in Book 5 of the Ontario Traffic Manual. The study results are summarized in Table 1.

As shown in the Table, observed traffic volumes at that intersection are 105 percent of the minimum required to meet the Provincial Warrant for all-way stop controls. Traffic volume data is based on turning movement counts collected on Tuesday, October 30, 2018, at the intersection of Carrier Crescent and Oberfrick Avenue. The study was conducted during the peak traffic periods of 7:00 a.m. to 9:00 a.m., 11:00 a.m. to 2:00 p.m. and 3:00 p.m. to 6:00 p.m.

Table 1: All Way Stop Warrant Analysis at Carrier Crescent and Oberfrick Avenue

| Warrant # | Warrant Description | Study Results |
|------------------|----------------------------|----------------------|
| Warrant 1 | Minimum Vehicular Volumes | 105% |
| Warrant 2 | Accident Hazards | 0% |
| Warrant 3 | Sight Restrictions | 0% |

The Table also shows that Warrant 2, based on accident hazards, was not met. Specifically, collision data from York Regional Police indicate that there have been no reported collisions at this intersection during the three-year period from June, 2015 to June, 2018.

In addition, Warrant 3, based on sight restrictions, was not met. Specifically, the sightline assessment found that pedestrian and motorist sightlines are unobstructed at this intersection. Moreover, the intersection geometry does not pose any issues, with both streets at level grade and intersecting at 90 degrees.

All-way stop controls are recommended when one of the above warrants meets or exceeds 100 percent. Given that Warrant 1, based on traffic volumes, is met, and due to the proximity of this intersection to Dr. Roberta Bondar Public School and St. Cecilia Catholic Elementary School, it is recommended that all-way stop controls be installed to improve vehicular and pedestrian movements.

Financial Impact

The capital cost associated with the installation of the all-way stop signs is estimated to be \$700 and has been included in the approved 2019 Operating Budget. The on-going cost to maintain the signs and pavement markings (stop bars) is estimated to be \$200 per annum and will be incorporated in future year Operating Budgets.

Broader Regional Impacts/Considerations

York Regional Police will be responsible for enforcing compliance with the recommended all-way stop at Carrier Crescent and Oberfrick Avenue. As such, a copy of this report will be forwarded to them upon approval of the recommendations by Council.

Conclusion

An all-way stop control is recommended at the intersection of Carrier Crescent and Oberfrick Avenue to improve traffic operations.

For more information, please contact:

Zoran Postic, Director, Transportation Services Parks and Forestry Operations and
Interim Deputy City Manager of Public Works, or

Margie Chung, Manager of Traffic Engineering.

Attachments

1. Location Map

Prepared by

Peter Trinh, Traffic Analyst, Ext 6157