



TO: GENERAL COMMITTEE


SUBJECT: BRADFORD STREET REPLACEMENT OF YIELD SIGN WITH STOP SIGN

WARD: WARD 2

PREPARED BY AND KEY CONTACT: J. SHARP, C.E.T.
SENIOR TRANSPORTATION TECHNOLOGIST (EXT. 4304) 

SUBMITTED BY: D. FRIARY
DIRECTOR OF ROADS, PARKS AND FLEET 

GENERAL MANAGER APPROVAL: R. J. FORWARD, MBA, M.Sc., P. Eng.
GENERAL MANAGER OF INFRASTRUCTURE & GROWTH MANAGEMENT 

CHIEF ADMINISTRATIVE OFFICER APPROVAL: C. LADD,
CHIEF ADMINISTRATIVE OFFICER 

RECOMMENDED MOTION

1. That Traffic By-law 80-138 Schedule "O" "Yield Right of Way" be amended by deleting the following:

Column1	Column2	Column 3
Tiffin Street	East	Bradford Street

2. That Traffic By-law 80-138 Schedule "S" "Providing For The Erection of Stop Signs At Intersection" be amended by adding the following:

Column 1	Column 2
Tiffin Street and Bradford Street	Westbound channelized right turn on Tiffin Street to northbound Bradford Street

PURPOSE & BACKGROUND

3. Staff received a request from the Wastewater Treatment Facility to investigate the feasibility of replacing the existing Yield sign with a Stop sign for westbound right turning vehicles on Tiffin Street to Bradford Street. This request is based on existing traffic control causing operational and safety concerns for vehicles on the roadway and exiting vehicles from the Wastewater Treatment Facility.
4. Bradford Street is a four (4) lane arterial roadway with a posted speed of 50 km/hr. The traffic volume on the roadway is approximately 14,000 vehicles per day.
5. Tiffin Street is a two (2) lane arterial roadway with a posted speed of 50km/h. The traffic volume on the roadway is approximately 12,000 vehicles per day.

ANALYSIS

6. The intersection of Tiffin Street and Bradford Street/Essa Road has a westbound channelized right turn lane merging onto northbound Bradford Street. Vehicles making this movement are currently controlled by a Yield sign. Based on the roadway geometrics of Bradford Street and existing landscape feature within the gore, sight visibility is limited.
7. The access connection for the Wastewater Treatment Facility is located at the end of the merge lane from Tiffin Street. Due to the location of the access, exiting vehicles from the site are forced to not only concern themselves with Bradford Street vehicles but also merging vehicles from Tiffin Street. This creates operational and safety concerns for both through traffic on Bradford Street and exiting vehicles from the Wastewater Treatment Facility.
8. Please refer to Appendix "A" for a map detailing the intersection and the location of the access to the Wastewater Treatment Facility in relation to the right turn channelization.
9. Staff has conducted on-site observations and confirms that motorists either fail to yield right-of-way or are not sure how to proceed. Replacing the Yield sign with a Stop sign will clearly define who has the right-of-way between vehicles at the merge. In addition, the condition for exiting vehicles from the Wastewater Treatment Facility will improve as the Stop control will create additional gaps in traffic for vehicles to safely enter the roadway.
10. In total, seventeen (17) collisions have occurred over approximately 36 months related to the merge lane onto Bradford Street. Of these, nine (9) were sideswipe and eight (8) were rear end collisions. These collision types are typical of existing conditions. Staff anticipates a reduction in both collision types with the installation of a Stop sign at this location.
11. Staff recommends that due to the collision history, reduced sight distance and location of the access to the Wastewater Treatment Facility, the Yield sign be replaced with a Stop sign at this location.
12. That Traffic By-law 80-138 Schedule "O" "Yield Right of Way" be amended by deleting the following:

Column1	Column2	Column 3
Tiffin Street	East	Bradford Street
13. That Traffic By-law 80-138 Schedule "S" "Providing For The Erection of Stop Signs At Intersection" be amended by adding the following:

Column 1	Column 2
Tiffin Street and Bradford Street	Westbound channelized right turn on Tiffin Street to northbound Bradford Street
14. Barrie Police Service supports Staffs' recommendation to replace the existing Yield sign with a Stop sign for westbound merging vehicles from Tiffin Street to Bradford Street.

ENVIRONMENTAL MATTERS

15. There are no environmental matters related to the recommendation.

ALTERNATIVES

16. There is one alternative available for consideration by General Committee:

Alternative #1 General Committee could decide to not replace the existing Yield sign with a Stop Sign for westbound merging vehicles from Tiffin Street to Bradford Street.

This alternative is not recommended due to the collision history, reduced sight distance and location of the access to the Wastewater Treatment Facility.

FINANCIAL

17. The cost to implement the Stop sign is approximately \$500.00 which can be accommodated in the 2015 Operating Budget

LINKAGE TO COUNCIL STRATEGIC PRIORITIES

18. The recommendations included in this Staff Report are specifically related to goals identified in the 2014-2018 Strategic Plan.

Improved Road Safety

19. The proposed recommendations will decrease vehicle collisions at this location. This will effectively improve road safety.

APPENDIX "A"

