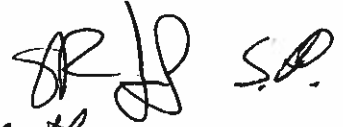
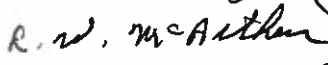



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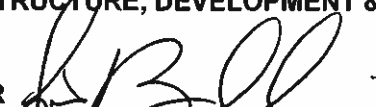
TO: GENERAL COMMITTEE

SUBJECT: ALL-WAY STOP POLICY

PREPARED BY AND KEY CONTACT: J. SHARP  
SENIOR TRAFFIC TECHNOLOGIST (EXT. 4304) 

SUBMITTED BY: R.W. MCARTHUR, P. Eng.   
DIRECTOR OF ENGINEERING

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

CHIEF ADMINISTRATIVE OFFICER APPROVAL: JON M. BABULIC,  
CHIEF ADMINISTRATIVE OFFICER 

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**RECOMMENDED MOTION**

1. That the following new policy be adopted related to requests for investigations into the installation of all-way stops:
  - a) That staff complete a review of traffic operations in the vicinity of the subject intersection in order to determine whether or not the criteria established in the Province of Ontario's Traffic Manual (OTM) All-way Stop Warrant is satisfied;
  - b) In a circumstance where the investigation concludes that the OTM All-way Stop Warrant is not satisfied, General Committee be advised of the date(s) of the investigation, the warrant parameters and the specific values for the subject intersection, in the form of a memorandum in accordance with the sample provided in Appendix "A" to Staff Report ENG018-11.
  - c) In a circumstance where the investigation concludes that the OTM All-way Stop Warrant is satisfied, a staff report be prepared for General Committee's consideration related to the installation of the All-way Stop.
2. That the existing "All-way Stop" Policy adopted by resolution 03-A-239, be repealed.

**PURPOSE & BACKGROUND**

3. Staff are reviewing the existing All-way Stop Policy to ensure that staff resources are maximized and remain focused on managing and improving the City's transportation system.
4. On May 5, 2003, City Council adopted Motion 03-G-285 which stated:

"That an "All-way Stop" Policy be adopted as follows.

That for all requests brought forward from City Council requesting the installation of an all-way stop, staff seek public input based on the following road classification criteria prior to the installation of the traffic control device and report back to Council.

- a) Local Residential Street – Residents residing within 150 metres of the intersection will receive a form letter and an all-way stop fact sheet outlining the purpose of an all-way stop. All comments or concerns received from adjacent residents along with Barrie Police Services and staff comments and recommendation will form part of a staff report back to General Committee.

- b) Collector & Arterial Roadways – Residents residing within 150 metres of the intersection will receive a form letter and all-way stop fact sheet outlining the purpose of an all-way stop. All comments or concerns received from adjacent residents, technical warrant data, Barrie Police Services and staff comments and recommendation will form part of a staff report back to General Committee.”
5. Currently, when directed by City Council to investigate an all-way stop installation, staff follow the above noted All-way Stop Policy and the All-way Stop Warrant in accordance with the Ontario Traffic Manual (OTM). The OTM provides a set of guidelines consistent with the Highway Traffic Act that are accepted standards of traffic engineers throughout the Province of Ontario. Part of the requirement is an eight (8) hour turning movement count and collision analysis at the intersection.
6. The OTM warrant analyzes different criteria for the installation of an all-way stop. Criteria includes such things as traffic volume, sight lines and collision experience, all of which have the ability to satisfy the warrant independently.
7. Under the current All-way Stop Policy approximately one hundred (100) intersections have been evaluated with only one (1) intersection satisfying the OTM All-way Stop Warrant. Approximately one (1) week of staff time is required for each intersection with the majority of surveyed residents opposed to the installation of the all-way stop.

#### **ANALYSIS**

8. Staff recommend removing the residential survey component of the proposed All-way Stop Policy as staff's decision to install an all-way stop is based entirely on the OTM All-way Stop Warrant and is not to be influenced by the residents' opinion.
9. The proposed All-way Stop Policy consists of two possible actions depending on the results of the OTM warrant. Staff will advise General Committee in memo format for intersections that do not satisfy the OTM warrant. Refer to Appendix “A” for a sample copy of the memo for unwarranted all-way stops.
10. Intersections satisfying the OTM warrant will continue to be brought forward to General Committee in the form of a Staff Report as the installation of an all-way stop requires Traffic By-law #80-138 to be amended accordingly.
11. The proposed All-way Stop Policy with the removal of the residential survey component and reporting back to General Committee in the form of a memo for unwarranted intersections will reduce the amount of staff time currently allocated to reviewing all-way stop requests by approximately 3 days. As a result, staff will be able to respond back to Council sooner and staff time can be focused on managing and improving the City's transportation system.
12. Staff will continue to work closely with Barrie Police Services in regards to potential all-way stop locations and traffic safety.

#### **ENVIRONMENTAL MATTERS**

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

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**ALTERNATIVES**

14. The following alternative is available for consideration by General Committee:

**Alternative #1** General Committee could authorize the existing All-way Stop Policy remain as is.

This alternative is not recommended as it requires additional staff time to be allocated to the review of intersections that typically do not satisfy the OTM All-way Stop Warrant.

**FINANCIAL**

15. There are no direct financial implications associated with the recommended motion.

**LINKAGE TO COUNCIL STRATEGIC PRIORITIES**

16. The 2010-2014 Council's Strategic Priorities have not been finalized as of the time of writing of this report.

**APPENDIX "A" – Sample Memorandum**



**Engineering Department  
MEMORANDUM TO  
GENERAL COMMITTEE**

**TO:** Mayor J. Lehman and Members of General Committee

**FROM:** J. Sharp, C.E.T., Senior Traffic Technologist

**NOTED:** R. W. McArthur, P. Eng., Director of Engineering  
R. J. Forward, MBA, M.Sc., P. Eng., General Manager of Infrastructure, Development & Culture  
J. M. Babulic, Chief Administrative Officer

**RE:** All –way Stop Investigation for Street A and Street B

**DATE:** September 13, 2010

This Memo is in response to the All-Way Stop investigation of Street A and Street B. On month date, year, City Council adopted Motion ##-G-### which stated:

"That staff in the Engineering Department investigate the feasibility of installing an All-Way Stop at the intersection of Street A and Street B and advise General Committee accordingly."

Staff have investigated the intersection of Street A and Street B to determine if an All-Way Stop is warranted based on the Ontario Traffic Manual (OTM) Book 5 – Regulatory Signs. The OTM warrant is based on volume, collision history, and visibility of the intersection. Volume is based on the total number of vehicles entering an intersection during the peak hour as well as the percentage of vehicles on the minor street during the peak hour. Collision history reviews collisions over a three-year period, which are only correctable through All-Way Stop control (i.e. right angle and turning type collisions) and which are reported to the Barrie Police Service. Stopping sight distance is the distance required for a driver to see ahead in order to stop if necessary. Each component of the All-Way Stop Warrant has the ability to satisfy the warrant independently.

A traffic count was completed on month date, year for the purpose of completing an All-Way Stop warrant. The results of the investigation are summarized below:

Description	Recorded Data	All-Way Warrant	Satisfied All-Way Warrant	
			Yes	No
Part 1a – Total Volume Peak Hour Traffic Volume <sup>(1)</sup>	## vehicles	Greater than 350 vehicles		
Part 1b – Volume Split Percentage of Traffic on Street B (Minor Street)	# vehicles (##%)	Greater than 25%		X
Part 2 – Collisions Intersection Collision History	1 collisions over a 3 year period	Average 4 per year over 3 years		X
Part 3 – Visibility Stop Sight Distance from Street B	No restrictions	Less than 110m		X

<sup>(1)</sup> Peak Hour Volume is the maximum number of vehicles that pass through the intersection during a one hour period.



***Engineering Department***  
**MEMORANDUM TO**  
**GENERAL COMMITTEE**

Staff have reviewed the intersection of Street A and Street B for the installation of an All-Way Stop. Based on the results of the investigation an All-Way Stop is not recommended for installation as minimum warrants are not satisfied.

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J. Sharp, C.E.T.  
Senior Traffic Technologist

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S. Patterson, P. Eng.  
Manager of Infrastructure Planning

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R. W. McArthur, P. Eng.  
Director of Engineering