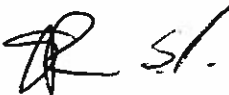
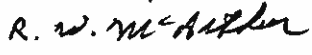



TO: GENERAL COMMITTEE

SUBJECT: TRAFFIC OPERATION OF ARDAGH ROAD BETWEEN FERNDAL DRIVE AND PATTERSON ROAD

PREPARED BY AND KEY CONTACT: J. MACDONALD
TRAFFIC TECHNOLOGIST (EXT. 5178) 

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 

RECOMMENDED MOTION

1. That no lane modifications be made to Ardagh Road at this time and staff continue to monitor the operation of Ardagh Road.

PURPOSE & BACKGROUND

2. On December 13, 2010, City Council adopted Motion 10-G-428 regarding investigation of conversion of Ardagh Road from the existing two (2) lanes into a four (4) lane roadway which states:
 - "1. That staff in the Engineering Department prepare a staff report regarding the section of Ardagh Road between Patterson Road and Ferndale Drive South being converted into four lanes.
 2. That a survey be conducted for the residents abutting the two lane section of Ardagh indicating their preference related to a two lane versus a four lane road and their preference of on-street parking versus no on-street parking along this area.
 3. That the staff report include, but not be limited to the following:
 - a) Current traffic volumes;
 - b) Assessment regarding on-street parking for a two lane versus four lane road;
 - c) Statistics concerning vehicles incidents and collisions;
 - d) Plans for ongoing maintenance of the road painting should the road remain at two lanes; and
 - e) Responses from the survey."
3. Ardagh Road between Ferndale Drive and Patterson Road is a two (2) lane arterial roadway with on-street parking and a pavement width of fourteen (14.0) metres. Please refer to Appendix "A".
4. Currently parking is permitted on both sides of Ardagh Road between Ferndale Drive and Patterson Road.
5. Overnight on-street parking is prohibited from December 1st to March 31st, between 12:00 a.m. and 7:00 a.m. for the purpose of snow clearing.

6. A Municipal Class Environmental Assessment (Class EA) was completed on Ardagh Road between Ferndale Drive and Patterson Road in September 2002.
7. During this process City staff recommended that Ardagh Road between Ferndale Drive and Patterson Road be constructed to a four (4) lane urban section with curb and gutter and sidewalks. The property owners on Ardagh Road did not want a four (4) lane road as traffic volumes at that time did not require four (4) lanes. As the typical lifespan of a road is over 25 years the City did not want to build a two lane road which would require widening in the near future.
8. Council approved in 2002 the reconstruction of Ardagh Road between Ferndale Drive and Patterson Road to a four (4) lane section and to install pavement markings for a two (2) lane road with on-street parking on an interim basis. The intention of the interim condition was that when traffic volumes reached a level requiring four (4) lanes of traffic on Ardagh Road between Ferndale Drive and Patterson Road, Ardagh Road would be repainted as a four (4) lane road.

ANALYSIS

9. Staff conducted a site visit and did not observe any queuing of vehicles at the intersection of Ardagh Road and Ferndale Drive or Ardagh Road and Patterson Road. Staff did not observe any operational concerns with the current two (2) lane configuration.
10. A Parking Questionnaire was prepared and mailed to 95 property owners on Ardagh Road and surrounding roadways. Results of the Parking Questionnaire responses are as follows:

ARDAGH ROAD TRAFFIC OPERATION SURVEY	RESPONSES RECEIVED	PERCENTAGE OF RESPONSES
Leave current lane configurations in place on Ardagh Road between Patterson Road and Ferndale Drive South.	16	84%
Convert Ardagh Road between Patterson Road and Ferndale Drive South from two (2) lanes into four (4) lanes.	3	16%
Leave existing parking regulations on Ardagh Road between Patterson Road and Ferndale Drive South.	12	63%
Restrict parking on Ardagh Road between Patterson Road and Ferndale Drive South.	1	5%
TOTAL (Out of 95)	19	20%

11. Respondents stated that there are no operational concerns on Ardagh Road between Ferndale Drive and Patterson Road. Respondents strongly expressed concerns with regards to converting Ardagh Road to a four (4) lane roadway and that it would increase speed and the potential for a serious collision.
12. Staff reviewed sight lines at the intersection of Ardagh Road and Snowshoe Trail as there is a crest in the road west of the intersection, and found that sight lines were acceptable. The required sight lines for Ardagh Road with a design speed of 70 km/h would be 110 metres. Staff measured sight lines to be approximately 120 metres. Sight lines were also acceptable on Ardagh Road at the intersections of Elizabeth Street and Crawford Street.

13. Current traffic volumes on Ardagh Road between Ferndale Drive and Patterson Road are approximately 9,500 vehicles per day. Typically a two (2) lane arterial roadway can have a daily volume of 10,000 vehicles a day without causing operational concerns. As the current traffic volumes along Ardagh Road are lower than 10,000 vehicles per day staff do not recommend the conversion from a two (2) lane to a four (4) lane roadway at this time.
14. Once an arterial roadway reaches volumes of between 12,000 to 15,000 vehicles per day typically four (4) travel lanes are required to operate the roadway at an appropriate level of service. Staff have projected traffic volumes on Ardagh Road between Ferndale Drive and Patterson Road could reach 12,000 vehicles per day by 2016.
15. Staff reviewed on-street parking to determine if there are any negative impacts on the operation of the roadway. Based on staff observation it was determined that there are no negative impacts associated with on-street parking. Staff recommend that current on-street parking regulations on Ardagh Road between Ferndale Drive and Patterson Road not be prohibited.
16. Left turn slip around lanes have been provided along Ardagh Road to allow vehicles to turn into local roadways without impacting through traffic.
17. Staff reviewed the collision history on Ardagh Road between Ferndale Drive and Patterson Road and determined that the conversion from a two (2) lane to a four (4) lane would not correct any of the collisions that have occurred on this roadway. The majority of collisions involved motorists not yielding the right of way to other motorists.
18. The Operations Department has advised that there would be minimal additional cost to change from a two (2) lane configuration with parking to four (4) travelled lanes. The annual cost to apply pavement markings to this section of Ardagh Road is approximately \$1,100 regardless of the number of travelled lanes. If Ardagh Road was converted to four (4) travelled lanes, there may be an increased cost for winter maintenance.
19. Staff will continue to review the traffic operation of Ardagh Road and will report back to Council when traffic operations warrant additional travel lanes on Ardagh Road.
20. Barrie Police Service, Barrie Fire and Emergency Service and Municipal Law Enforcement do not oppose the recommended motion.

ENVIRONMENTAL MATTERS

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

ALTERNATIVES

22. The following alternatives are available for consideration by General Committee:

Alternative #1

General Committee could decide to prohibit on-street parking on Ardagh Road between Ferndale Drive and Patterson Road.

This alternative is not recommended as vehicles currently parking on Ardagh Road do not cause operational concerns.

Alternative #2

General Committee could decide to convert Ardagh Road between Ferndale Drive and Patterson Road from a two (2) lane to a four (4) lane roadway.

This alternative is not recommended as the current volumes do not pose any operational or safety concerns.

FINANCIAL

23. There are no financial implications for the Corporation resulting from the proposed recommendation.

LINKAGE TO COUNCIL STRATEGIC PRIORITIES

24. The recommendations included in this Staff Report are not specifically related to the goals identified in the 2010-2014 City Council Strategic Plan.

APPENDIX "A"

