



TO: GENERAL COMMITTEE


SUBJECT: TEMPORARY TRAFFIC CALMING MEASURES

WARD: WARDS 6, 7 and 10

PREPARED BY AND KEY CONTACT: T. HANRAHAN
SUPERVISOR, TRAFFIC SERVICES (EXT. 4934) 

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 staff utilize the Flexible Bollard Pilot Program to provide effective but less costly methods of traffic calming on Twiss Drive, Grand Forest Drive, and Cumming Drive.
2. That Traffic By-Law 80-138 Schedule "L" "One-Way Streets" be amended by adding the following:

Column A

"Grand Forest Drive for 20m northerly
from Golden Meadow Road

Column B

South"

PURPOSE & BACKGROUND

3. On September 29, 2014 City Council adopted Motion 14-G-250 regarding investigation of additional methods of temporary traffic calming:

"That staff in the Roads, Parks and Fleet Department investigate additional methods of traffic calming in residential neighbourhoods including equally effective but less costly measures than currently deployed and report back to General Committee as part of the 2015 Business Plan. "
4. The current Temporary Traffic Calming Project is an annual program consisting of speed cushion installations available for all wards in areas identified by Council and reviewed by staff with an annual budget of \$40,000.
5. The inventory of the Temporary Speed Cushion Program is limited to 3 speed cushion crossings per ward. Additional cushion sets would need to be purchased to expand the program, at a cost of approximately \$2,250 per speed cushion crossing.
6. The Temporary Speed Cushion Program is a seasonal program which is installed in early spring and removed prior to winter snow clearing activities.

ANALYSIS

7. The Transportation Association of Canada (TAC) Canadian Guideline for Neighbourhood Traffic Calming identifies the following potential benefits to be considered as part of a traffic calming program:
 - a) Reduce vehicular speeds;
 - b) Discourage through traffic;
 - c) Minimize conflict between street users; and
 - d) Improve the neighborhood environment.
8. The Transportation Association of Canada (TAC) Canadian Guideline for Neighbourhood Traffic Calming identifies the following potential dis-benefits to be considered as part of a traffic calming program:
 - a) Impact to local users;
 - b) Emergency response;
 - c) Other travel modes;
 - d) Enforcement; and
 - e) Maintenance.
9. The City of Barrie currently implements speed cushions as part of the Temporary Traffic Calming Program. Speed cushions are considered to be part of the TAC Canadian Guideline for Neighbourhood Traffic Calming measures identified as "Speed Hump". A speed hump is categorized as a Vertical Deflection Measure.
10. Other equally effective measures include chicanes, curb extensions, on-street parking and various closures or obstructions, and traffic circles.
11. Staff investigated the use of flexible bollards (see Appendix A) and they have been installed as part of the Temporary Traffic Calming Program. Flexible bollards can be used in various configurations to create horizontal deflection or obstruction measures. The flexible bollard installations would meet the TAC guidelines for effectiveness and are significantly less costly than speed cushions.
12. Staff have consulted with Roads Operations, Transit and Barrie Fire and Emergency Service to ensure that the flexible bollards do not present a hazard to vehicles or equipment. Staff recommends that the flexible bollards be used seasonally.
13. Staff recommends flexible bollards be incorporated into the Temporary Traffic Calming Program as stand-alone devices as well as devices to support the Temporary Speed Cushion Program. By incorporating flexible bollards into the Temporary Speed Cushion Program, staff could increase the number of locations included in the program by as much as 50%.
14. Staff recommends flexible bollards be installed on Twiss Drive and Cumming Drive as part of a pilot project to review their effectiveness. The configuration on these streets would be Horizontal Deflection Measures in the form of a chicane or mimic on-street parking (see Appendix B).

15. Staff have investigated concerns from residents on Grand Forest Drive regarding nuisance traffic and speeding. Staff have determined that non local motorists are using Grand Forest Drive to access Hurst Drive and Big Bay Point Road. Grand Forest Drive is a local road and was not intended to act as a collector road. The preferred designated route for non-local motorists in this area is Golden Meadow Road. Staff have investigated options to encourage motorists to utilize the designated collector route on Golden Meadow Road.
16. Staff recommends flexible bollards be installed on Grand Forest Drive as part of a pilot project to review their effectiveness. The configuration on Grand Forest Drive would be an "Obstruction" type in the form of a Directional Closure (see Appendix C). Grand Forest Drive would be altered to one-way for approximately 20m north of Golden Meadow Road.
17. Staff recommends that Traffic By-Law 80-138 Schedule "L" "One-Way Streets be amended by adding the following:

Column A

Column B

"Grand Forest Drive for 20m northerly from Golden Meadow Road

South"

18. Staff will perform before vs. after studies to gauge the effectiveness of the proposed pilot measures.
19. Barrie Police Service, Barrie Fire and Emergency Service do not oppose the recommended motion.

ENVIRONMENTAL MATTERS

20. There are no environmental matters related to the recommendations.

ALTERNATIVES

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

Alternative #1

General Committee could decide to not include flexible bollards as part of a Temporary Traffic Calming Program.

This alternative is not recommended as the speeding and nuisance traffic on Twiss Drive, Cumming Drive and Grand Forest Drive would not be addressed.

FINANCIAL

22. The cost to implement the additional temporary traffic calming utilizing flexible bollards is approximately \$2,000 which can be accommodated in the 2015 Operating Budget

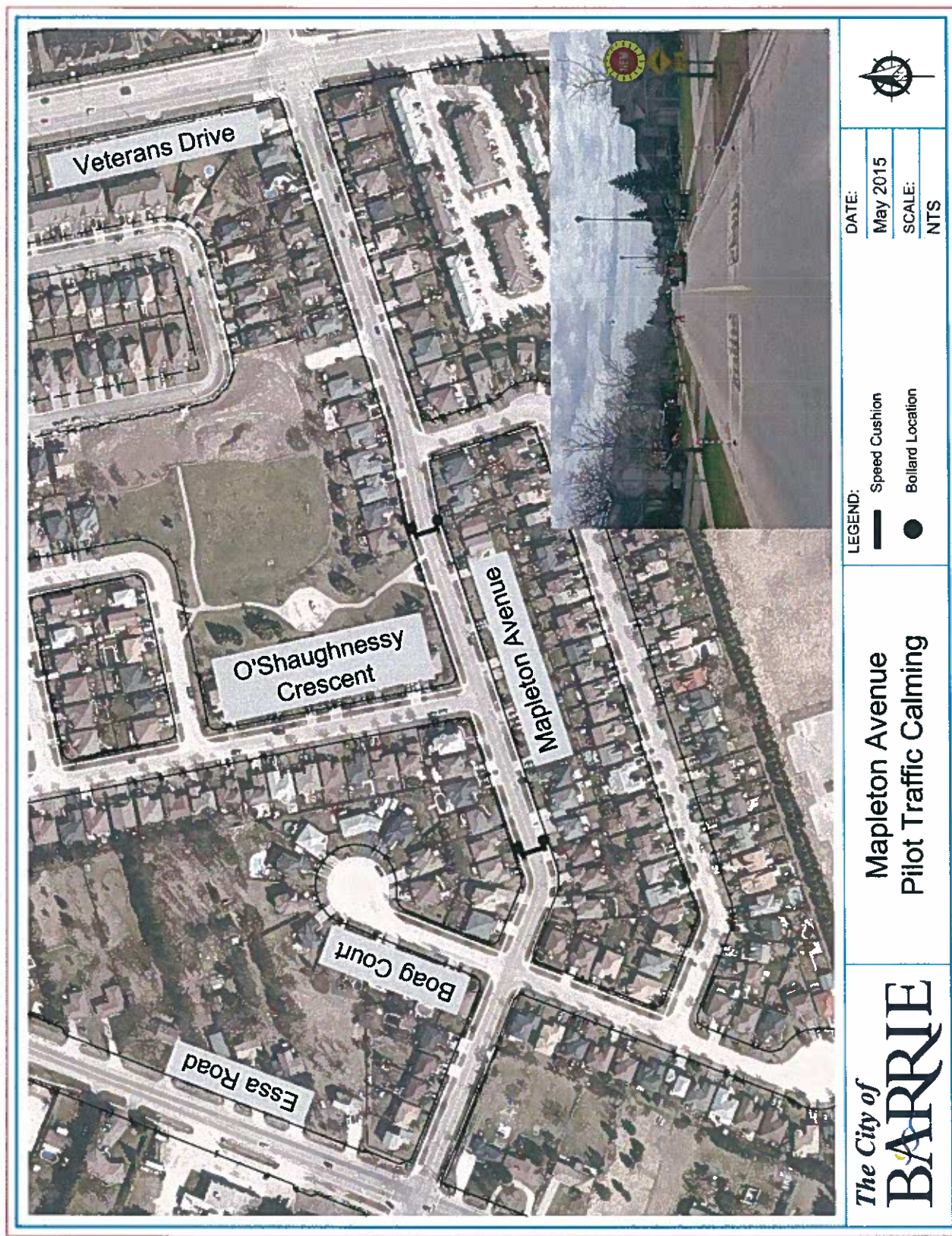
LINKAGE TO COUNCIL STRATEGIC PRIORITIES

23. The recommendation(s) included in this Staff Report are specifically related to the goals identified in the 2014-2018 Strategic Plan.

Well Planned Transportation

24. The proposed measures will reduce speeds and discourage through traffic. This will effectively improve road safety.

APPENDIX "A"

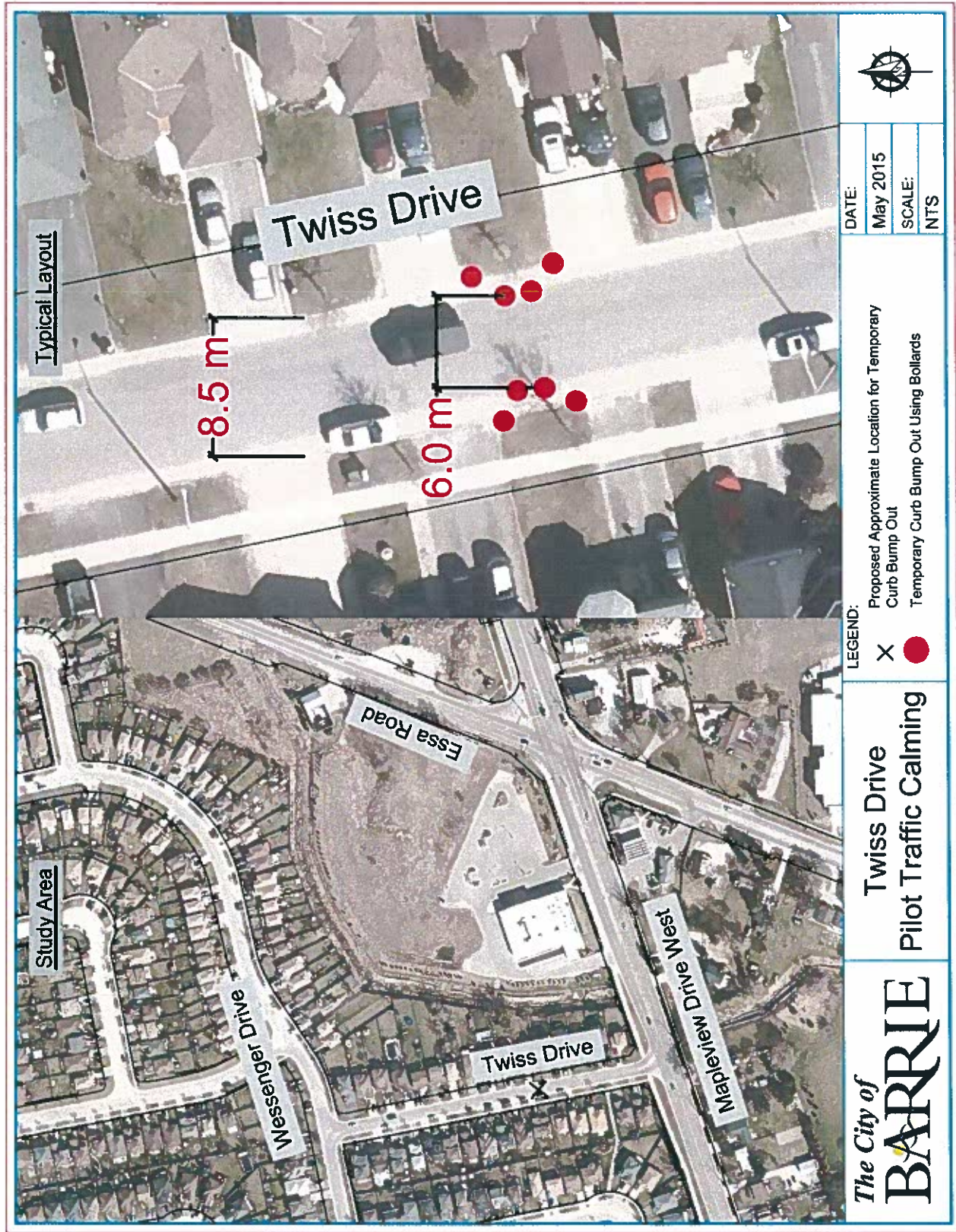


DATE: May 2015
SCALE: NTS

LEGEND:
— Speed Cushion
● Bollard Location

Mapleton Avenue
Pilot Traffic Calming

APPENDIX "B"

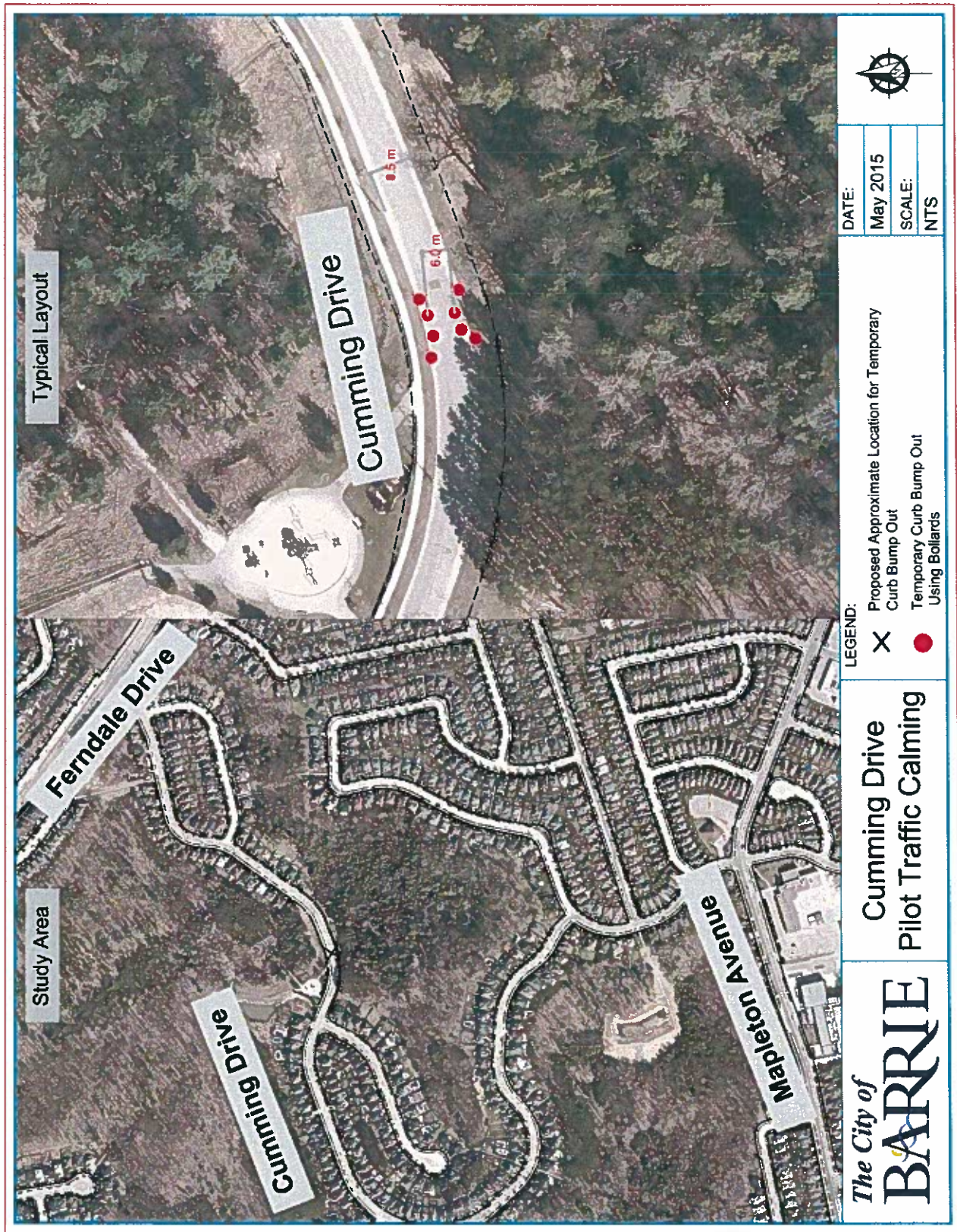


DATE: May 2015
SCALE: NTS

LEGEND:
X Proposed Approximate Location for Temporary Curb Bump Out
● Temporary Curb Bump Out Using Bollards

Twiss Drive
Pilot Traffic Calming

APPENDIX "B" cont'd



DATE: May 2015
SCALE: NTS

LEGEND:
 X Proposed Approximate Location for Temporary Curb Bump Out
 ● Temporary Curb Bump Out Using Bollards

Cumming Drive
Pilot Traffic Calming

APPENDIX "C"



DATE: May 2015
SCALE: NTS

LEGEND:
 ● Proposed Approximate Location for Temporary Directional Closure
 □ Proposed Temporary Directional Closure with Bollards
 | Direction of Travel

Grand Forest Drive
Pilot Traffic Calming

