



Engineering Services Report

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Report To: General Government Committee

Date of Meeting: September 4, 2018

Report Number: EGD-015-18 **Resolution:** GG-387-18

File Number: **By-law Number:**

Report Subject: Rainbow Crosswalks

Recommendations:

1. That Report EGD-015-18 be received for information; and
2. That all interested parties listed in Report EGD-015-18 and any delegations be advised of Council's decision.

Report Overview

In response to Council's request for staff to identify potential locations for a rainbow crosswalk, staff have reviewed best practices and applicable standards and guidelines including those within the *Highway Traffic Act* (HTA) and the Ontario Ministry of Transportation publication of the Ontario Traffic Manual (OTM) Book 11 and 15. Staff have also consulted with the Transportation Association of Canada (TAC), Region of Durham and our insurer. Based on the information available, this report assesses the design, maintenance and operational aspects of the installation of a rainbow crosswalk as well as potential installation locations and funding options for Council's consideration.

1. Background

- 1.1 During the June 18, 2018 General Government Committee meeting, a delegation requested that Council consider the installation of rainbow crosswalks to "promote the message of inclusion and acceptance" for the lesbian, gay, bisexual, transgender and queer (LGBTQ) community. The delegation requested a rainbow crosswalk be located in the vicinity of a school to increase awareness by school children and parents.

- 1.2 At the Council Meeting of July 3, 2018, Council approved Resolution #GG-343-18 which stated:

"That staff report back to the General Government Committee meeting of September 4, 2018 with preferred location(s) for a rainbow crosswalk in the Municipality of Clarington; and

That the report include options for funding the rainbow crosswalk(s)."

2. Technical Review

- 2.1 The Ontario *Highway Traffic Act* (HTA) sets out rules and regulates many aspects pertaining to the use of roads under all jurisdictions. While there is no mention of colours being used for crosswalks, the HTA specifies and regulates the types of pedestrian crossovers including required pavement marking patterns and signage.
- 2.2 The Ontario Traffic Manual (OTM) set of books supplements the HTA, providing guidelines and specifications relating to the provincial regulations. These books were developed jointly by local, regional, provincial and private sector experts in order to provide consistency in application approach and driver behaviour. In reviewing OTM Book 11, Pavement, Hazard and Delineation Markings, and OTM Book 15, Pedestrian Crossing Treatments, ladder style crosswalks are a combination of white zebra pavement markings aligned perpendicular to the pedestrian direction of travel together with standard parallel white crosswalk lines. While there is no restriction on elements such as decorative work, texture, brick or paver, outside parallel white lines are always required. Additionally, material used should not present tripping or slipping hazards and any textured patterns must be properly oriented. It should also provide sufficient

contrast at night and over long periods of time. Not all coloured materials provide the same level of visibility to motorists.

- 2.3 The Transportation Association of Canada (TAC) is an organization that focuses on the safety aspects of transportation networks and are a main source of road safety information widely used by municipal governments and road authorities. The TAC provides guidance relating to the design and operation of roads through the development of design standards, specifications and uniform recognizable road markings and signage. Clarington staff contacted the TAC to seek their input on rainbow crosswalks and they provided the following response:

“At present TAC has no published guidance on the use of rainbow crossings. There is a volunteer project under the Traffic Operations and Management Standing Committee that will examine ‘decorative crosswalk pavement markings,’ which will include rainbow crosswalks and other unconventional designs. This project is just getting underway, so there is nothing to report yet. Realistically, the earliest the committee could submit a report for review would be April 2019, at the association’s semi-annual meeting.”

- 2.4 Clarington staff also consulted with the Region of Durham regarding the use of rainbow crosswalks on their roads and at signalized intersections which they are responsible for operating throughout the Region including those on local municipal roads. Regional staff noted that their Traffic Engineering and Operations staff follow the practices that are recommended in the Ontario Ministry of Transportation publication of the OTM, specifically Book 11, in order to maintain uniformity and road safety. They are very careful when selecting their pavement marking materials and ensure that the reflective and surface frictional properties of these materials meet their standards to avoid any safety or liability concerns to pedestrians or vehicles on the road. They do not recommend any form of crosswalk marking schemes other than what is defined in the OTM.
- 2.5 Key elements in the design of any road or traffic related facility is a driver’s behaviour and perception in recognizing or interpreting road signage and pavement markings. Consistency between the Region of Durham and our municipality regarding the application of pavement markings and road signage is of paramount importance and needs to be adequately addressed when considering a rainbow crosswalk design.
- 2.6 The Durham Insurance Pool has contacted our insurer, Cowan Insurance, and they have provided the following response:

“We live in a litigious society, a driver involved in a collision with a pedestrian at a rainbow crosswalk may claim that they did not recognize the rainbow colours as a crosswalk. While we all want to demonstrate inclusiveness, remaining with the current requirements of the Ontario Traffic Manual or the Transportation Association of Canada would be appropriate until these organizations have reviewed and possibly revised their guideline.”

- 2.7 A number of jurisdictions across Canada, including several in Ontario, have installed rainbow crosswalks recently to celebrate LGBTQ awareness and rights. There is limited information available regarding incidents and driver behavior experiences in the vicinity these rainbow crosswalks.
- 2.8 The technical organizations and the reference material referred to in this report did not provide staff with sufficient details regarding road design and operational safety related to rainbow crosswalks. The interpretation of legislation, design standards and specifications applicable to rainbow crosswalk design and operation has not been addressed by the Ministry of Transportation, TAC or any other governing agency at this time. Should the municipality move forward with a rainbow crosswalk, the experiences of other municipal government agencies remains the best source for information and design.

3. Construction and Maintenance Costs

- 3.1 In researching other rainbow crosswalks, the estimated cost of an initial installation is roughly \$8,000 to \$12,000 per crossing (i.e. if all four crosswalks at an intersection were completed it would cost between \$32,000 to \$48,000). The cost variation is related to both the length and width of the crosswalk. It should be noted that depending on the traffic volumes at the location, the crosswalk would have to be repainted every one to two years. Therefore, if it is intended that a rainbow crosswalk remain indefinitely, a budget of \$8,000 to \$12,000 would be needed every one to two years.

4. Analysis and Potential Crosswalk Locations

- 4.1 After reviewing the above technical information, specifically the HTA and OTM, it is staff's position that while these documents are not law and there are no restrictions on alternate applications (such as decorative work, texture, brick or paver within the lines defining the crosswalk), any deviation from these guidelines presents a potential liability risk in the event of collisions that may occur at or near these sites. This position is supported by our consultation with TAC and Region of Durham. It is staff's view that Clarington should continue to follow the guidelines provided by TAC and OTM in order to provide consistency and uniformity for all users throughout the municipality.
- 4.2 However, recognizing Council's direction given by Resolution #GG-343-18, staff have identified several locations for a potential rainbow crosswalk. The locations are close to schools and meet the appropriate road geometrics and supporting traffic data requirements. The sites are subject to the preparation of a satisfactory intersection or crosswalk design and must confirm to best practices, the HTA, OTM, TAC standards and specifications.
- 4.3 The list of potential rainbow crosswalk locations are as follows:
- A. West leg of the all way stop intersection of Prestonvale Rd. and Meadowglade Rd.;
 - B. South leg of the all way stop intersection of Trulls Rd. and Avondale Dr.;

- C. South leg of the all way stop intersection of Bons Ave. and Scugog St.;
- D. South leg of the all way stop intersection of Apple Blossom Blvd. and Mearns Ave.;
- E. West leg of the all way stop intersection of Edward Street and Glass Court; or
- F. East leg of the intersection of Brooking Street and Longworth Avenue, Intersection Pedestrian Signal (would require consultation and approval of the Region).

5. Funding Options

- 5.1 Below are potential scenarios that could be considered to fund the initial installation in 2018 and subsequent maintenance costs:
 - A. 100% of the funding to come from the Municipality's annual budget;
 - B. 50% of the funding to come from the Municipality's annual budget with the other 50% of funding to come from the requesting group; or
 - C. 100% of funding to come from the requesting group.
- 5.2 Funding of these works was not included in the 2018 budget. If funds are to be reallocated from our current budget, it would defer that value of work to a future year. For example, \$8,000 allocated to painting roughly 22,000 m of white edge line or yellow centreline would have to be deferred to a future year.
- 5.3 Should Council not want to defer existing work in order to fund the rainbow crosswalks in 2018, the following option provides the same cost sharing scenarios while deferring the Municipality's cost share to 2019:
 - D. Refer the works and the cost sharing scenarios to the 2019 budget for consideration.

6. Concurrence

Not Applicable

7. Conclusion


- 7.1 Staff recognize that consistency and uniformity of crosswalk design is important for safe driving behaviour. The preferable design would be one that consistent across the municipality as any inconsistent markings, designs, or decorative work that are unfamiliar to drivers can be distracting and lead to driver errors.
- 7.2 In response to Resolution #GG-343-18, the list of potential locations for rainbow crossings is contained in section 4.3 and the funding options are contained in sections 5.1 and 5.3 of this report.

- 7.3 Should Council decide to move forward with a trial rainbow crosswalk, it will be important to develop a public awareness campaign in advance to inform road users of these designs and help ensure safety. The location should also be closely monitored and reviewed to ensure it is not contributing to incidents or collisions.
- 7.4 If Council chooses to add further rainbow crosswalk locations, it would require a review of competing financial interests relating to the maintenance of our road network.

8. Strategic Plan Application

Not Applicable.

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The following is a list of the interested parties to be notified of Council's decision:

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Emily Allison
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