



# The Corporation of the Town of Milton

Report To:	Council
From:	M. Paul Cripps, P. Eng., Commissioner, Engineering Services
Date:	October 28, 2019
Report No:	ENG-029-19
Subject:	Transport Canada Rail Regulations - Update on Financial Requirements
Recommendation:	<b>THAT ENG-029-19 be received for information related to the 2020 Capital Budget.</b>

## REPORT

### Background

On November 28, 2014 the new Transport Canada Grade Crossing regulations came into effect pursuant to the Railway Safety Act. Road authorities and railway companies were given a five-year period (November 28, 2021) to upgrade existing crossings to meet the new regulations.

These regulations were updated as a result of a review conducted by the Transportation Safety Board of Canada, which concluded that the risk of trains colliding with vehicles was too high. This review and mandated reviews of the Railway Safety Act resulted in Transport Canada raising the standards and creating new regulations for grade railway crossings in order to reduce the potential of a collision between a train and a vehicle. A grade crossing is an intersection where a road crosses a railway track at the same level.

### Discussion

In order to meet the requirements of the new regulations, the Engineering Services department retained a consultant (CIMA+) in 2017 to review the existing 19 grade crossings located on roads under the jurisdiction of the Town of Milton. As a result, a number of recommendations were made, which included upgrading pavement markings and signage, increasing sightlines by trimming vegetation and the installation of Advanced Active Warning Systems (AAWS) at specific grade crossings. Between 2017 and 2019 work was completed at all grade crossings, which included signage and pavement marking upgrades as well as vegetation removal.

As a result of the review conducted by CIMA+, six of the 19 grade crossings did not have sufficient sightlines to meet the new regulations because of roadway geometry. Grade crossing wigwag lights must be visible from a defined distance that is known as the



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Stopping Sight Distance (SSD). Of the six identified locations, Bronte Street North will be upgraded to meet regulations during road reconstruction.

The remaining locations require further measures due to the grade crossing not meeting the SSD:

### **Sixth Line North of Derry Road (CP Rail)**

The installation of a larger pole and mast arm for the signage and light units would provide adequate visibility on the south approach within the SSD. Staff have proposed this solution to CP Rail and they have agreed to this work.

### **Conservation Road West of First Line Nassagaweya (CP Rail)**

The installation of a larger pole and mast arm for the signage and light units would provide adequate visibility on the east approach within the SSD. Staff have proposed this solution to CP Rail and they have agreed to this work.

### **Canyon Road East of Campbell Avenue East (CP Rail)**

On the north approach, the railway crossing sign and light units are not continuously visible throughout the SSD to vehicles approaching the crossing. The removal of trees and vegetation on Town property will provide the required SSD.

### **10 Side Road East of First Line Nassagaweya (Guelph Junction Railway)**

On the east approach, the railway crossing sign and light units are not continuously visible throughout the SSD to vehicles approaching the crossing. The removal of a few trees within the Town's right-of-way will provide the required SSD.

### **15 Side Road East of First Line Nassagaweya (Guelph Junction Railway)**

On the east approach, the light units are not continuously visible (obstructed by horizontal curve, tree branches) throughout the SSD to vehicles approaching the crossing. A Prepare to Stop at Railway Crossing sign and AAWS is required for this grade crossing. (See Appendix I). Staff continue to work with Guelph Junction Railway and Milton Hydro regarding the installation of power cables for the AAWS. There may be an option of using overhead cables versus underground conduit in order to reduce the cost of the installation of the system. As this work is underway, an exact cost is not yet available.

The installation of an AAWS and larger poles and mast arms for the light units requires infrastructure at the railway crossing. Engineering Services staff have received quotes for the required work from Canadian Pacific Railway and Guelph Junction Railway for their portion of the work.



Appendix I

**PREPARE TO STOP AT RAILWAY CROSSING  
AHEAD Sign (With Amber Flashers)**

