
College Drive Speed Limit

Recommendations

That the Standing Policy Committee on Transportation recommend to City Council:

1. That a speed limit of 90 kph on College Drive from a point 1,600 metres east of Central Avenue to the East City Limit be established; and
2. That the City Solicitor be requested to prepare the appropriate amendment to Bylaw No. 7200, The Traffic Bylaw.

Topic and Purpose

The purpose of this report is to provide additional information to support a reduced speed limit along portions of College Drive.

Report Highlights

Construction of an interchange at College Drive and McOrmond Drive is underway and requires an amendment to the existing speed limit to ensure safe and efficient traffic flows.

Strategic Goals

This report supports the Strategic Goal of Moving Around by improving safety for all road users (pedestrians, cyclists, and drivers), and optimizing the flow of people and goods in and around the city.

Background

City Council at its meeting held on March 23, 2015, approved a report from the General Manager, Transportation & Utilities Department to change the classification of College Drive, between the CPR tracks and the city limits, to Urban Expressway in order to improve connectivity into the Holmwood Sector.

Establishing the classification of the roadway and speed limit in advance is required to proceed with design of the interchange. A speed limit of 90 kph is being recommended for this purpose.

Report

The Administration uses the Transportation Association of Canada (TAC) Geometric Design Guide to design the roadway network to ensure safe and efficient traffic flows. The recommended speed limits for new and/or modified roadways are based on road classification, adjacent land use, driver behaviour and familiarity, and/or safety concerns. The goal is to establish a reasonable and safe speed limit that is appropriate for a particular roadway based on its design and classification.

TAC indicates that the design speed for freeways and expressways should be designed with the highest practical design speed to promote traffic mobility, efficiency and safety,

and that provision should be made for a speed that satisfies nearly all drivers, that being the 85th percentile speed (which is the speed at which 85 percent of vehicles are travelling at or below). TAC does not indicate that design speed should be a certain amount above the posted speed limit although most Western Canadian jurisdictions use a design speed 10 km/h higher than the posted speed limit. This provides for a factor of safety for vehicles travelling above the speed limit.

The interchange at College Drive and McOrmond Drive was originally designed for a speed limit along College Drive of 80 kph. A review of the design criteria considering an increase of the speed limit from 80 kph to 90 kph was completed, and the findings are as follows:

- The physical infrastructure of the interchange itself can accommodate the slight increase to the speed limit.
- The clear zone, which is the area where a vehicle leaving the road can travel without the potential of striking an object, requires an additional 2.5 metres of width. The piers and abutment walls for the interchange will be protected by barriers so therefore are not impacted, but two cantilever overhead sign structures would need to be re-designed.
- The size of the lettering on the guide signage is impacted by the speed limit as the higher the speed, the larger the letters need to be. A detailed review of the sign design is required to confirm if larger signs are required, which in turn may impact the design of the cantilever structures (I-beam and foundation sizes).

Based on this review, the Administration is recommending that with minor design changes, a maximum allowable speed limit of 90 kph could be safely accommodated along College Drive.

A review of this speed limit will be required upon consideration of an additional access point into the Brighton neighbourhood consistent with that contained in the approved Concept Plan. During the design phase of this access point, the appropriate speed limit will be reviewed to ensure that the intersection can operate efficiently and safely.

Options to the Recommendation

Maintaining the existing 100 kph maximum allowable speed is an option but is not recommended. The design of the entrance ramps for the interchange would need to be redesigned and may require additional land. A change of this magnitude would result in delays to the interchange project and require reconstruction of portions of the interchange.

Policy Implications

Upon approval by City Council, amendments to Bylaw No. 7200, The Traffic Bylaw will be required.

Financial Implications

The incremental cost for the design changes to accommodate a 90 kph speed limit have not yet been quantified. If they cannot be borne by the current funding for the project, a further report will be presented.

Other Considerations/Implications

There are no public and/or stakeholder involvement, communications, environmental, privacy, or CPTED considerations or implications.

Due Date for Follow-up and/or Project Completion

Completion of the interchange is planned for October 2018. Timing of the design and construction of the additional access point from College Drive into the Brighton neighbourhood is dependent upon the pace of development.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Report Approval

Written by: Jay Magus, Acting Director of Transportation
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities Department

TRANS JM – College Drive Speed Limit.docx