

## **Traffic Operations Review - Twyn Rivers Drive**

**Date:** September 27, 2017  
**To:** Scarborough Community Council  
**From:** Acting Director, Transportation Services, Scarborough District  
**Wards:** Ward 42 – Scarborough Rouge River  
Ward 44 - Scarborough East

### **SUMMARY**

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This staff report is about a matter for which the Community Council has delegated authority from City Council to make a final decision.

This report responds to a request from the Scarborough Community Council.

### **RECOMMENDATIONS**

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The Acting Director, Transportation Services, Scarborough District recommends that:

1. Scarborough Community Council receive this report for information.

### **FINANCIAL IMPACT**

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There is no financial impact resulting from the adoption of the recommendation in this report.

### **DECISION HISTORY**

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At its meeting of November 15, 2016 the Scarborough Community Council referred Item SC18.30 to the Director, Transportation Services, Scarborough District, for report back to the Scarborough Community Council in the spring of 2017. The following is a link to the decision:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.SC18.30>

This item detailed a letter from Scarborough Glenn De Baeremaeker (Ward 38 - Scarborough Centre) to the Scarborough Community Council regarding safety and liability issues surrounding Twyn Rivers Drive.

However, with the passing of the late Councillor Ron Moeser in early 2017, Ward 44 was declared vacant; it was prudent for staff to wait until the appointment of Councillor Jim Hart prior to reporting on this matter.

## **COMMENTS**

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The Scarborough Community Council has referred this matter to staff to report on the safety and liability issues surrounding Twyn Rivers Drive. Since then, Councillor Glenn De Baeremaeker (Ward 38 - Scarborough Centre) has requested staff to consider the feasibility of closing Twyn Rivers Drive to through motorized vehicle traffic at some point west of the boundary between the City of Toronto and the City of Pickering.

### **Existing Conditions**

Twyn Rivers Drive is a two-lane collector road from Sheppard Avenue East in the City of Toronto at its west end that leads into the City of Pickering connecting with Altona Road in the east end. Twyn Rivers has a 24 hour traffic volume of up 6,100 vehicles per day (vpd) that is consistent with the collector road volume of 2,500 to 8,000 vpd. It currently has No Parking zones signed on both sides, a speed limit of 50 km/h on the west end and 40 km/h in the Rouge River valley. There are two bridges that cross the Rouge River, several bends, and a grade of up to 10% as the road rises from the westerly Bailey bridge up to Sheppard Avenue East. There are no sidewalks on this road.

Twyn Rivers Drive appears to be a legacy road from colonial times and may be approximately 200 years old, while the two bridges are about 100 years old and have signed 3 tonne load restrictions. A regulatory Heavy Vehicle Prohibition sign is posted at the west end of Twyn Rivers drive, as well as westbound Yield signage at the westerly Bailey bridge. Warning signs about curves, pedestrian crossings, narrow bridges, etc. are posted along this road. Twyn Rivers Drive is not a designated excess load/oversize vehicle route. A warning sign about the bridge load limits is also posted at the west end of Twyn Rivers Drive, and staff have requested the City of Pickering to post similar warning signs for the westbound direction at Altona Road and Woodview Avenue to mitigate heavy trucks from approaching Twyn Rivers Drive from the east.

### **Analysis**

#### *Traffic Volumes and Speeds*

Speed and volume studies were conducted in late April of 2017 at three locations.

For Twyn Rivers Drive between Sheppard Avenue East and the westerly bridge, the 85th percentile speed was 75 km/h where it is posted at 50 km/h and a maximum grade of up to approximately 18% is present.

For Twyn Rivers Drive between the two bridges, the 85th percentile speed was 66 km/h where the grade is relatively flat and the posted speed limit is 40 km/h.

For Twyn Rivers Drive east of the easterly bridge near the car park, the 85th percentile speed was 72 km/h where the grade is relatively flat and the posted speed limit is 40 km/h.

The 24-hour traffic volume approaches approximately 6,100 vehicles per day (vpd). The above speed data is indicative of motorists driving with excessive speed and this report has been forwarded to the Toronto Police Service for any enforcement action that they deem necessary.

### *Collision Review*

The collision record indicates that the mitigation measures that have been put in the place are mitigating collisions. Of the 64 collisions that have occurred between 2011 and 2016 (last year of complete information), the prevailing pattern has been for mostly rear-end collisions with some single vehicle loss of control collisions, and 1 animal strike. There have been no recorded pedestrian or bicycle collisions, and 9 motorcycle collisions. However, various regulatory and warning signs for speed limits, parking prohibitions, curves/bends, narrow bridges, pedestrian warnings, animal crossings, etc. are in place for the portion of Twyn Rivers Drive within the City of Toronto. Considering the length of the Toronto portion of Twyn Rivers Drive (1.6 km), this collision history is not indicative of a high collision road.

### *Jurisdictional Consultation*

The Regional Municipality of Durham and the City of Pickering have been consulted on this matter and concerns have been raised about closing Twyn Rivers Drive as it is one of only a few routes in the area to cross the Rouge River, the others being Highway 401, Kingston Road, Finch Avenue East, and Steeles Avenue East. Twyn Rivers Drive can become an alternative commuter and emergency vehicle access route if there are congestion incidents on Highway 401 from time to time, and it has been identified as an evacuation route in the event of a Pickering nuclear station evacuation event. As a result, any such closure would need to take into account the potential impacts to adjacent roads, emergency access, winter maintenance, other jurisdictions, etc.

The Transportation Services Division is planning to undertake a Transportation Master Plan (TMP) Environmental Assessment regarding the legacy road bridges to be conducted in 2018. This study will outline a strategic plan for the future of these bridges and will consider, among other things whether the bridges should be rehabilitated, replace or closed. The operation of Twyn Rivers Drive could be incorporated into this comprehensive area study that would ensure that any and all impacts are properly

accounted for and addressed, including evaluating options for motorized vehicle traffic on Twyn Rivers Drive between the City of Toronto and the City of Pickering.

### *Liability*

It is believed that liability along this road is mitigated through the various regulatory and warning signs, pavement markings, and guard-rails along this legacy road, although the steepest grades and the bends would not meet contemporary design standards without such mitigating measures. However, staff can conduct a further review to see if more warning signage is needed, especially in the area of the Parks Canada trail heads.

## **CONTACT**

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## **SIGNATURE**

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Carly Hinks, C.E.T.  
Acting Director, Transportation Services, Scarborough District

MAO:cr

sc1755  
D17-7972130

## **ATTACHMENTS**

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1. Location Plan (Traffic Operations Review - Twyn Rivers Drive)

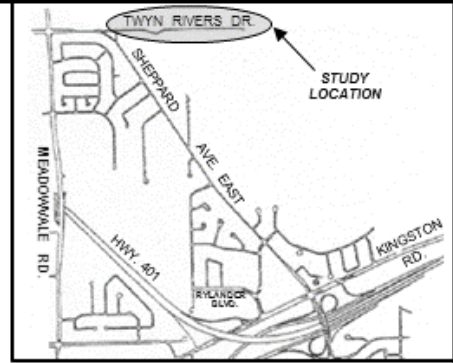
**LEGEND**



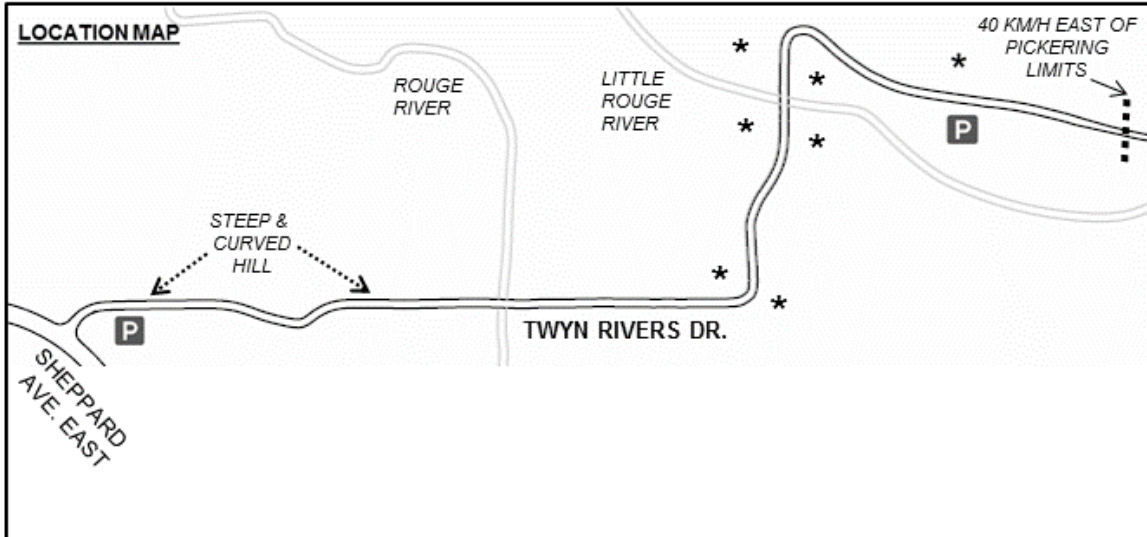
EXISTING PARKING LOT



EXISTING HIKING TRAIL AT ROADWAY



**KEY MAP**



**LOCATION MAP**



TRANSPORTATION SERVICES

TRAFFIC OPERATIONS  
Scarborough District

SCALE:	N.T.S.
DATE:	Sept., 2017
DRAFTING:	K.S./O.K.

**TRAFFIC OPERATIONS REVIEW  
TWIN RIVERS DRIVE**

FILE NUMBER: D17-8137084	
ATTACHMENT 1	WARDS 42 & 44