

Road Safety Review - St. Mark's Road, between Humbercrest Boulevard and Varsity Road

Date: March 23, 2023

To: Toronto and East York Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 4, Parkdale-High Park

SUMMARY

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

Toronto and East York Community Council directed Transportation Services to report with a safety proposal for St. Mark's Road, between Humbercrest Boulevard and Varsity Road. There is an approximate 12 percent grade on this stretch of St. Mark's Road which has resulted in a number of safety concerns being raised by the public.

This report provides an overview of the assessments and improvements proposed and/or undertaken by Transportation Services to date since the investigations took place last year.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. Toronto and East York Community Council receive this report for information.

FINANCIAL IMPACT

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

If Toronto and East York Community Council amends the recommendation in this report and approves the installation of a barrier on St. Mark's Road, the estimated cost of the subject barriers is approximately \$124,000.00. This does not include the costs associated with installation. The delivery would be subject to availability and competing priorities within the Transportation Services 2023 Capital Budget.

DECISION HISTORY

On January 26, 2023, Toronto and East York Community Council adopted Item TE2.81 (Safety Proposal for St. Mark's Road) directing Transportation Services to report back on the following items:

- a) Results of the May 9, 2022 community walk about
- b) Staff proposal to build cycling connections to Humber Trail
- c) Timeline for long term changes to configuration; and
- d) Any changes that is needed for snow removal

The Toronto and East York Community Council decision can be found at:

[Agenda Item History - 2023.TE2.81 \(toronto.ca\)](#)

On April 21, 2022, Toronto and East York Community Council adopted item TE32.66 authorizing the installation of the all-way stop control and removal of the existing pedestrian crossover (PXO) on St. Mark's Road immediately east of Humbercrest Boulevard. The Toronto and East York Community Council decision can be found at:

[Agenda Item History - 2022.TE32.66 \(toronto.ca\)](#)

COMMENTS

In response to the direction from Toronto and East York Community Council's adoption of item TE2.81, Transportation Services has studied measures to enhance safety and operations on St. Mark's Road, between Humbercrest Boulevard and Varsity Road.

Existing Conditions

St. Mark's Road is characterized by the following conditions:

- It is a two-lane, east-west, collector roadway
- It operates two-way traffic on a pavement width of approximately 8.5 metres
- The daily two-way traffic volume is approximately 1,300 vehicles
- The speed limit is 30 km/h
- Heavy trucks are prohibited at all times
- There is no Toronto Transit Commission (TTC) service provided

- There is a sidewalk located on one side (north) of the street
- A guiderail and a pedestrian handrail are provided on the north side of the sidewalk
- There is an approximate 12 percent grade on this stretch of St. Mark's Road
- Parking is prohibited at all times on both sides of the street

St. Mark's Road is located in a residential neighbourhood west of Jane Street and south of Dundas Street West. The Humber River Recreational Trail runs adjacent to the neighbourhood. This street is one of three accesses into the Warren Park neighbourhood, the other two being Gooch Avenue and Varsity Road/Old Dundas Street/Humber Hill Avenue.

The intersection of St. Mark's Road and Humbercrest Boulevard is equipped with all-way stop control. In addition to the stop signs, overhead red flashing beacons have been installed to enhance the presence of the stop signs. Additionally, a school crossing guard has been posted at this intersection.

The intersection of St. Mark's Road and Varsity Road is a "T" type intersection, equipped with a yield control sign for northbound traffic whereas the east-west traffic is uncontrolled free-flow.

A summary of the requests adopted by Toronto and East York Community Council and Transportation Services' assessment and proposed improvements are described in detail as follows:

a) Site meeting

On May 9, 2022 the Ward Councillor along with area residents and Transportation Services staff met on site. At this meeting residents expressed a number of concerns, including pedestrian safety on the hill. Given the slope on this stretch of St. Mark's Road, between Humbercrest Boulevard and Varsity Road, residents were concerned that vehicles travelling westbound (downhill) during winter weather could lose control and hit the pedestrians on the sidewalk. Similarly, there were also concerns with eastbound (uphill) vehicles not being able to gain traction due to icy conditions and sliding off towards the sidewalk.

Road Safety Review

Traffic Operations staff conducted a detailed safety review on St. Mark's Road, between Humbercrest Boulevard and Varsity Road.

Curb Depression

Staff reviewed residents' request for a curb depression on the south side of Varsity Road where St. Mark's Road meets Varsity Road. Curb depressions are not recommended as there is no stop sign or formal crossing facility here and essentially vehicles travelling in the east/west direction have the right-of-way.

Depressing the curb implies to pedestrians that this is a proper crossing contrary to the legacy design that was intending pedestrians to stop, wait, find a gap and then proceed. Installation of a proper pedestrian crossing facility at this location including the curb depressions requested would require a significant redesign of the entire intersection in addition to modifications to the existing guiderail that was intended to protect properties on the south side of Varsity Road.

This type of improvement could only be considered in the longer term if/when this road segment is revisited for road reconstruction.

Improvements to Signage Made

Following the site meeting, staff installed the following signs:

- Hidden Intersection sign for westbound traffic approaching Varsity Road
- Curve Warning signs along with 20 km/h advisory speed tabs for both eastbound and westbound traffic
- St. Mark's Road continues one block south with arrow pointing left for westbound traffic
- Stop Ahead sign for eastbound traffic approaching the intersection of Humbercrest Boulevard and St. Mark's Road
- 30 km/h speed limit sign for eastbound traffic at the start of the hill (north intersection of St. Mark's Road and Varsity Road)

Pavement Markings

The pavement markings within the study area are covered by the City's Annual Repaint Program and are refreshed yearly. The site investigation confirmed the yellow centre line is visible and in good condition.

Sight Lines

Sight lines along St. Mark's Road, between Humbercrest Boulevard and Varsity Road, were reviewed and there were no impediments identified for road users. Nonetheless, Transportation Services will monitor the foliage on the north side of Varsity Road, west of St. Mark's Road, during the warmer months for any sight line obstructions and take appropriate action if required.

Guiderail State and Repairs Made

During the site meeting, portions of the existing handrail on the north side of St. Mark's Road was identified as damaged. This has since been repaired.

Collision Review

A review of the Toronto Police Service collision records, with specific emphasis on pedestrian, cyclist and killed or seriously injured (KSI) collisions on St. Mark's Road, between Humbercrest Boulevard and Varsity Road, for the five year period ending December 31, 2022 did not reveal any fatal or serious injury collisions.

However, there were two recent collisions noted for consideration that illustrate the public's concerns with respect to traffic losing control on the hill during the winter months:

- On December 23, 2022 vehicle travelling westbound on St. Mark's Road came into contact with the guardrail on the south side of Varsity Road. Further details are not available.
- On February 2, 2022 a six-car contact occurred on the hill with vehicles sliding into the sidewalk. It was assumed that the icy road condition may have been the contributing factor.

All Way Stop Control - Humbercrest Boulevard and St. Mark's Road

On July 11, 2022 the all-way stop control was activated and the PXO decommissioned. The work included the installation of a concrete pad on the southwest corner to provide a full complement of pedestrian crossings. As a follow-up, on the operation of the all-way stop on October 4, 2022 staff conducted a stop compliance study with specific focus on the eastbound traffic, as they are travelling uphill as they approach the intersection. The study results are summarized below in Table 1:

Table 1: Stop Compliance Study (Eastbound Traffic) - Humbercrest Boulevard and St. Mark's Road

Time	Non-Stopping (>6 km/h)		Practically Stopped (0-6 km/h)		Stopped by Traffic		Voluntary Full Stop	
	M	C	M	C	M	C	M	C
7:30 a.m. - 8:30 a.m.	2	1	32	1	1	0	45	0
8:30 a.m. - 9:30 a.m.	2	1	39	0	5	0	37	0
11:30 a.m. - 1:00 p.m.	1	2	64	0	13	0	23	0
3:00 p.m. - 4:00 p.m.	0	3	50	1	1	0	15	2
4:00 p.m. - 5:00 p.m.	0	3	56	0	6	0	12	0
5:00 p.m. - 6:00 p.m.	0	7	79	0	8	0	25	0

**M = motorist

**C = cyclist

To date, staff have not received any complaints regarding the operation nor compliance of the all-way stop control. Due to the issues associated with the weather and icy conditions on the hill, staff may continue to monitor during the winter months.

Nonetheless, residents who observe motorists continually violating traffic rules may file their complaints on the link provided below by Toronto Police Service:

[Online Reporting- Toronto Police Service \(tps.ca\)](https://www.tps.ca)

Consideration for Concrete Barriers During Winter Months

The area residents have indicated concerns about pedestrian safety on the sidewalk located on the north side of St. Mark's Road, between Humbercrest Boulevard and Varsity Road. It was reported that during inclement weather vehicles have slid off the roadway and come into contact with the sidewalk. Pedestrians using this sidewalk include school-age children destined to/from area schools. The residents have proposed that the installation of physical barriers will be an appropriate measure to address these safety concerns.

A preliminary review following the site meeting disclosed that this proposal did not appear to be feasible. Typically, significant installations of this nature would be considered in the context of planned road work, like the current configuration of Pottery Road. Furthermore, given the current width of the sidewalk, any treatment would need to be located on the road, which was seen as problematic.

Notwithstanding, Transportation Services further investigated the barrier proposal in more detail to determine the feasibility of installing concrete barriers only during winter months to address the concerns for vehicles potentially losing control on the hill. The detailed assessment confirmed that while technically feasible, there would be significant concerns associated with this proposal. These are detailed as follows:

- There were a few incidents reported of vehicles losing control here, but there were no fatal or serious collisions occurring over the past five years. From a data perspective, this typically would not constitute a priority location.
- As the barrier would have to be placed on the road, it would narrow the westbound lane and bring vehicles closer to cyclists. This would create a safety concern for cyclists due to vehicles attempting to pass them.
- The addition of the barrier would impact the road drainage impede snow clearing operations as it would reduce snow storage space.

The potential barrier treatment would require gaps to be provided between barriers for drainage and wildlife crossing. The barriers will require crash attenuators on the exposed ends of the barriers to address head-on collisions. Transportation Services preliminary cost estimate for this treatment is approximately \$124,000.00, not including the cost of installation. An example of the type of barrier that would be installed is provided in Attachment 2.

Given the negative impacts to other road users and the street's maintenance, as well as the collision history that does not suggest that there is an undue safety concern for pedestrians at this location, the installation of a barrier on St. Mark's Road is not supported by Transportation Services.

b) Cycling Connection to Humber Trail

In 2021, City Council authorized the [Cycling Network Plan Near Term Implementation Program \(2022-2024\)](#).

As part of the approved program, Annette Street, Old Mill Drive, Baby Point, Humbercrest Boulevard, St. Mark's Road and a few other small segments for streets were identified to be 'renewed.' After the road resurfacing on Jane Street, led by Engineering and Construction Services, is complete, Transportation Services will refresh existing pavement markings, and install improved cycling wayfinding signage on St. Mark's Road to guide cyclists heading to and from the Humber River Trail and the existing on-street bikeway network. The Jane Street resurfacing is anticipated to be complete in summer 2023, the cycling wayfinding will be implemented in late 2023 or in the second quarter of 2024. The cycling wayfinding project will not impact motor vehicle parking or traffic.

c) Timeline for Future Road Reconstruction

No capital work for St. Mark's Road is identified in the Transportation Services 10-Year Capital Program, which includes state of good repair (SOGR) work. Improvements to the existing geometric road design would require further investigation, which could possibly trigger the need for an Environmental Assessment.

d) Any changes that is needed for snow removal

St. Mark's Road is classified as a collector road, and as such, generally receives the standard level of winter maintenance for a road of this classification. Transportation Services acknowledges that the conditions on St. Mark's Road, between Humbercrest Boulevard and Varsity Road, present a unique set of conditions and challenges.

Accordingly, staff will be working with the contractors delivering winter maintenance to the City of Toronto to improve and prioritize the level of service currently provided on the hill. This option is preferable to the installation of barriers, which could potentially worsen the conditions on the hill during the winter months due to the noted issues for snow storage.

The Ward Councillor has been advised of the recommendation of this staff report.

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1: Map - Area Map - St. Mark's Road, between Humbercrest Boulevard and Varsity Road
Attachment 2: MTO Type Barrier - 911.203



