

Traffic Calming (Speed Humps) - Vessel Crescent

Date: April 18, 2024

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 25, Scarborough-Rouge Park

SUMMARY

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

Transportation Services has reviewed the need for speed humps on Vessel Crescent, between Bridgend Street (west intersection) and Bridgend Street (east intersection). The assessment indicates the warrant criteria as set out in the updated Traffic Calming Policy has not been satisfied. Therefore, staff do not recommend the installation of speed humps on Vessel Crescent.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. Scarborough Community Council not authorize the installation of speed humps on Vessel Crescent, between Bridgend Street (west intersection) and Bridgend Street (east intersection).

FINANCIAL IMPACT

There are no financial impacts resulting from the adoption of the recommendation in this report.

If Scarborough Community Council amends the recommendation in this report and authorizes the installation of speed humps on Vessel Street, the estimated cost of installing one speed hump is \$4,000.00. Funding would be subject to availability and competing priorities within the Transportation Services 2024 Capital Budget.

DECISION HISTORY

On November 16, 2023, Scarborough Community Council adopted Item SC9.13, titled Road Safety on Vessel Crescent, directing Transportation Services to investigate the feasibility of installing traffic calming measures on Vessel Crescent. The Community Council decision can be found at:

<https://secure.toronto.ca/council/agenda-item.do?item=2023.SC9.13>

COMMENTS

In response to the direction from Scarborough Community Council's adoption of Item SC9.13, Transportation Services investigated the feasibility of installing speed humps on Vessel Crescent.

Existing Conditions

Vessel Crescent is characterized by the following conditions:

- It is a two-lane, north/south and east/west local roadway
- It operates two-way traffic on a pavement width of approximately 7.5 metres
- The daily two-way traffic volume varies from approximately 120 to 210 vehicles
- The speed limit is 50 km/h. Transportation Services advises that the speed limit is planned to be reduced to 30 km/h on this street by 2026+, consistent with Item 2019.IE6.8 (Vision Zero 2.0 – Road Safety Plan Update)
- Heavy trucks are prohibited at all times
- There is no Toronto Transit Commission (TTC) service provided
- There are sidewalks located on the west and south sides of the street

The land use in the area consists of detached and semi-detached residential dwellings. Vessel Crescent is not within a designated Community Safety Zone.

A map of the area and locations of the requested speed humps is included in Attachment 3.

Study Results

In order for speed humps to be recommended on a street, the eligibility and warrant criteria as set out in the City of Toronto's updated Traffic Calming Policy must be satisfied. The eligibility criteria include the road classification, the presence of sidewalks, maximum traffic volume, the road grade and the impacts to emergency services and transit. The warrant criteria include the block length and the operating speeds. Details of the eligibility and warrant criteria are included in Attachment 1.

As part of the assessment of the warrant criteria, two vehicle speed and volume studies were conducted on Vessel Crescent from December 5, 2023 to December 7, 2023. The results of the studies were evaluated against the warrant criteria for Traffic Calming as adopted by City Council. The study results on Vessel Crescent are summarized in Table 1.

Table 1: Vessel Crescent Speed and Volume Study Results

| Road section | Daily Traffic Volume | 85th percentile speed criteria | | 95th percentile speed criteria | |
|----------------------------|----------------------|--------------------------------|---------------------|--------------------------------|---------------------|
| | | Results | Warrant Requirement | Results | Warrant Requirement |
| Vessel Crescent - East Leg | 213 | 37 km/h | 38 km/h | 42 km/h | 45 km/h |
| Vessel Crescent - West Leg | 122 | 34 km/h | 38 km/h | 38 km/h | 45 km/h |

Based on the study results, the overall warrant for traffic calming was not met for the following reason:

- **Minimum speed:** The operating speed must be a minimum of 8 km/h over the warranted speed limit. The operating speed of 37 km/h on the east leg of Vessel Crescent is 1 km/h under the required speed of 38 km/h. The 95th percentile speed must be a minimum of 15 km/h over the warranted speed limit. The 95th percentile speed of 42 km/h is 3 km/h under the required speed of 45 km/h. Similarly on the west leg of Vessel Crescent the operating speed of 34 km/h is 4 km/h under the required speed of 38 km/h and the 95th percentile speed of 38 km/h is 7 km/h under the required speed of 45 km/h.

The overall investigation concluded that the eligibility and warrant criteria as outlined in the updated Traffic Calming Policy has not been satisfied. Therefore, staff do not recommend the installation of speed humps on Vessel Street.

Alternate Recommendations

If, despite the findings above, Scarborough Community Council decides to proceed with installing speed humps on Vessel Crescent, it may approve the following:

1. Scarborough Community Council authorize the installation of a speed hump on Vessel Crescent, between Bridgend Street (west intersection) and the north leg of Vessel Crescent.

2. Scarborough Community Council direct the City Solicitor to prepare a by-law to alter the roadway for the installation of one speed hump on Vessel Crescent, between Bridgend Street (west intersection) and the north leg of Vessel Crescent generally as shown on Attachment 4, Drawing TC-268, dated April 2024, attached to the report titled "Traffic Calming (Speed Humps) - Vessel Crescent" from the Director, Traffic Management, Transportation Services.

3. Subject to approval of Recommendations 1 and 2 above, Scarborough Community Council reduce the speed limit from 50 km/h to 30 km/h on Vessel Crescent between Bridgend Street (west intersection) and Bridgend Street (east intersection), in conjunction with the installation of speed humps.

The estimated cost for installing one speed hump on Vessel Crescent is \$4,000.00. The installation of a speed hump on Vessel Crescent would be subject to availability in Transportation Services 2024 Capital Budget and competing priorities.

Relative Priority and Other Impacts

In the event that the number of approved requests for roadway traffic calming measures exceed the budget allocated for installation, funding for approved installations will be prioritized using a Prioritization Score. This score is made up of a Quantitative Score and a Qualitative Score.

The Quantitative Score is based on the results of the data collection, including travel speeds and traffic volumes to prioritize locations with higher vehicle speeds and volumes.

The Qualitative Score includes:

- Collision history to prioritize locations with a history of serious injury or fatal collisions and those involving a pedestrian or cyclist
- Equity to prioritize equity-deserving communities with a high-concentration of priority populations and those that are transportation disadvantaged
- Expected presence of vulnerable road users (elderly population, school children and pedestrians, including transit riders) to prioritize locations with a higher risk of fatal and serious injury collisions

The Quantitative and Qualitative Scores are averaged to provide the complete Prioritization Score. Vessel Crescent scored 19 ranking points out of a possible 100.

No alterations to parking regulations would be required, nor would the number of parking spaces be affected by the installation of speed humps. Installation of a speed hump would have minimal effect on winter services, street cleaning and garbage collection.

Consultation with emergency services (Toronto Police Service, Toronto Fire Services and Toronto Paramedic Services) is required to ensure that the design and layout of a traffic calming proposal does not unduly affect their operations. Emergency services were advised of this proposal.

Toronto Paramedics Services responded and advised of potential delays in emergency responses but expressed support for initiatives that enhance community safety. A copy of their full response is included in Attachment 3. Toronto Police Services and Toronto Fire Services have not provided comments at the time of writing this report. Installing speed humps or speed cushions will result in slower operating speeds for all vehicles, including emergency service vehicles.

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

CONTACT

Dan Clement, CET, Manager Traffic Operations (Area 1), Transportation Services
416-397-5021, Dan.Clement@toronto.ca

SIGNATURE

Roger Browne, M.A.Sc., P. Eng.
Director, Traffic Management, Transportation Services

ATTACHMENTS

Attachment 1: Traffic Calming Warrant (East Leg) - Vessel Crescent
Attachment 2 Traffic Calming Warrant (West Leg) - Vessel Crescent
Attachment 3: Letter from Toronto Paramedic Services, dated April 8, 2024
Attachment 4: Speed Hump Location Plan - Vessel Crescent, Drawing TC-268

Attachment 1: Traffic Calming Warrant - Vessel Crescent (East Leg)

| Criteria | | Requirement | Warrant Satisfied? |
|----------------------|-----------------------|--|--------------------|
| Community Support | | A direct request from the Ward Councillor OR identified by Transportation Services in consultation with the Ward Councillor | Yes |
| Eligibility Criteria | Road Classification | Classified as a local or collector roadway, according to the Toronto Road Classification System | Yes |
| | Sidewalks | Presence of a sidewalk on at least one side of a local roadway and both sides of a collector roadway is preferred but not required | Yes |
| | Traffic Volume | Maximum average daily traffic volume of less than 8,000 vehicles per day | Yes |
| | Road Grade | Maximum roadway grade of up to 5%, can be considered in locations where the road grade is between 5% and 8% with additional review | Yes |
| | Emergency Services | No significant impacts on emergency services, including Toronto Fire, Paramedic and Police Services | No |
| | Transit Services | No significant impacts to regularly scheduled Toronto Transit Commission (TTC) services | Yes |
| Warrant Criteria | Minimum Block Length | Minimum block length of 120 metres based on the measured distance from centre to centre of controlled intersections AND | Yes (255 m) |
| | 85th percentile speed | Minimum 85th percentile speed of 8 km/h over the warranted speed limit OR | No (37 km/h) |
| | 95th percentile speed | Minimum 95th percentile speed of 15 km/h over the warranted speed limit | No (42 km/h) |

Attachment 2 Traffic Calming Warrant (West Leg) - Vessel Crescent

| Criteria | | Requirement | Warrant Satisfied? |
|----------------------|-----------------------|--|--------------------|
| Community Support | | A direct request from the Ward Councillor OR identified by Transportation Services in consultation with the Ward Councillor | Yes |
| Eligibility Criteria | Road Classification | Classified as a local or collector roadway, according to the Toronto Road Classification System | Yes |
| | Sidewalks | Presence of a sidewalk on at least one side of a local roadway and both sides of a collector roadway is preferred but not required | Yes |
| | Traffic Volume | Maximum average daily traffic volume of less than 8,000 vehicles per day | Yes |
| | Road Grade | Maximum roadway grade of up to 5%, can be considered in locations where the road grade is between 5% and 8% with additional review | Yes |
| | Emergency Services | No significant impacts on emergency services, including Toronto Fire, Paramedic and Police Services | No |
| | Transit Services | No significant impacts to regularly scheduled Toronto Transit Commission (TTC) services | Yes |
| Warrant Criteria | Minimum Block Length | Minimum block length of 120 metres based on the measured distance from centre to centre of controlled intersections AND | Yes (255 m) |
| | 85th percentile speed | Minimum 85th percentile speed of 8 km/h over the warranted speed limit OR | No (34 km/h) |
| | 95th percentile speed | Minimum 95th percentile speed of 15 km/h over the warranted speed limit | No (38 km/h) |

Attachment 3: Letter from Toronto Paramedic Services, dated April 8, 2024

From: [Atif Sharif](#)
To: [Omar Omar](#)
Subject: RE: Speed Humps Installation - Vessel Crescent
Date: April 8, 2024 8:42:13 AM
Attachments: [image002.png](#)
[image003.png](#)

Good morning Omar,

We have received and reviewed the proposal for installation of speed humps on Vessel Crescent, with the following comments:

Vessel Crescent appears to primarily service the residents that reside on the roadway and would not impact response times for other community members. It is important that the applicant understand that the installation of traffic calming devices will reduce the speed that emergency vehicles travel when responding to emergencies on roadways where they are installed.

Toronto Paramedic Services is supportive of community initiatives that improve the safety of all citizens of, and visitors to, the City of Toronto. Traffic and pedestrian safety are key components of a healthy neighbourhood, and we endeavour to support the wishes of the community to implement measures to improve upon these components.

Best regards,

Atif Sharif
A/Commander - Policy, Projects & Process Improvement
Office of the Chief
Toronto Paramedic Services
Tel: 416-397-7493



