

Traffic Calming (Speed Humps) - Hill Crescent

Date: June 25, 2024

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 24, Scarborough-Guildwood

SUMMARY

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

Transportation Services is recommending the installation of speed humps on Hill Crescent, between Markham Road and Scarborough Golf Club Road. Staff's assessment indicates that the criteria as set out in the updated Traffic Calming Policy has been satisfied. Therefore, speed humps should be installed on Hill Crescent.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. Scarborough Community Council authorize the installation of speed humps on Hill Crescent, between Markham Road and Scarborough Golf Club Road.
2. Scarborough Community Council direct the City Solicitor to prepare a by-law to alter the roadway for the installation of 14 speed humps on Hill Crescent, between Markham Road and Scarborough Golf Club Road, generally as shown on Attachments 5, 6 and 7, Drawings TC-302, TC-303, and TC-304, dated May 2024, attached to the report entitled "Traffic Calming (Speed Humps) - Hill 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 40 km/h to 30 km/h on Hill Crescent, between Markham Road and Scarborough Golf Club Road, in conjunction with the installation of speed humps.

FINANCIAL IMPACT

The estimated cost for installing fourteen speed humps on Hill Crescent is \$56,000.00. Funding would be subject to availability and competing priorities within the Transportation Services 2025 Capital Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services received a request from the Ward Councillor, on behalf of area residents, to investigate the feasibility of installing speed humps on Hill Crescent, between Markham Road and Scarborough Golf Club Road. The residents are concerned that motorists travel at a high rate of speed on Hill Crescent.

Existing Conditions

Hill Crescent is characterized by the following conditions:

- It is a two-lane, northeast-southwest, collector roadway
- It operates two-way traffic on a pavement width of approximately 8.5 metres
- The daily two-way traffic volume varies from approximately 1,100 to 1,500 vehicles
- The speed limit is 40 km/h
- Heavy trucks are prohibited at all times
- There is no Toronto Transit Commission (TTC) service provided
- There are no sidewalks located on both sides of the street

The land use in the area consists of detached residential dwellings. This subject section of Hill Crescent is not within a designated Community Safety Zone.

A map of the area and proposed locations of the speed humps is included in Attachments 5, 6 and 7.

Study Results

As part of the assessment of the warrant criteria, four vehicle speed and volume studies were conducted on Hill Crescent from January 10 to 12, 2023. The results of the studies were evaluated against the warrant criteria for Traffic Calming as adopted by the City Council. The study results on Hill Crescent are summarized in Table 1.

Table 1: Hill 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
Hill Crescent, between Brinloor Boulevard and Duncombe Boulevard	1,447	51 km/h	48 km/h	55 km/h	55 km/h
Hill Crescent, between Duncombe Boulevard and Heathfield Drive	1,463	48 km/h	48 km/h	53 km/h	55 km/h
Hill Crescent, between Muir Drive and Bethune Boulevard	1,455	49 km/h	48 km/h	54 km/h	55 km/h
Hill Crescent, between Bethune Boulevard and Scarborough Golf Club Road	1,117	47 km/h	48 km/h	51 km/h	55 km/h

Based on the study results, the sections of Hill Crescent, between Markham Road and Bethune Boulevard, have satisfied the warrant criteria for the 85th percentile speeds. Additionally, all blocks are over the minimum 120 metre length requirement.

However, the section of Hill Crescent, between Bethune Boulevard and Scarborough Golf Club Road, does not meet the overall warrant for traffic calming 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 47 km/h is 1 km/h under the required speed of 48 km/h. The 95th percentile speed must be a minimum of 15 km/h over the warranted speed limit. The 95th percentile speed of 51 km/h is 4 km/h under the required speed of 55 km/h.

Given that Hill Crescent, between Bethune Boulevard and Scarborough Golf Club Road, is the only section that does not satisfy the Traffic Calming warrant, staff recommend the installation of speed humps on this section to maintain consistency.

The overall investigation concluded that the eligibility and warrant criteria outlined in the updated Traffic Calming Policy has been satisfied. Therefore, staff recommended the installation of speed humps over the entire length of Hill Crescent.

Relative Priority and Other Impacts

In the event that the number of approved requests for roadway traffic calming measures exceeds 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. Hill Crescent, between Markham Road and Scarborough Golf Club Road, scored 33 ranking points out of a possible 100.

No alterations to parking regulations will be required, nor will the number of parking spaces be affected by the installation of speed humps. Installation of speed humps will 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 Fire 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 8. Toronto Paramedic Services have also provided their comments. A copy of their full response is included in Attachment 9. Toronto Police Service has not provided comments back at the time of writing this report. Installing speed humps will result in slower operating speeds for all vehicles, including emergency service vehicles.

The Ward Councillor has been advised of the recommendations 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 - Hill Crescent, between Brinloor Boulevard and Duncombe Boulevard
- Attachment 2: Traffic Calming Warrant - Hill Crescent, between Duncombe Boulevard and Heathfield Drive
- Attachment 3: Traffic Calming Warrant - Hill Crescent, between Muir Drive and Bethune Boulevard
- Attachment 4: Traffic Calming Warrant - Hill Crescent, between Bethune Boulevard and Scarborough Golf Club Road
- Attachment 5: Speed Hump Locations Plan - Hill Crescent - TC-302 (Matchline, see drawing TC-303)
- Attachment 6: Speed Hump Locations Plan - Hill Crescent - TC-303 (Matchline, see drawing TC-304)
- Attachment 7: Speed Hump Locations Plan - Hill Crescent - TC-304
- Attachment 8: Letter from Toronto Fire Services, dated April 15, 2024
- Attachment 9: Letter from Toronto Paramedic Services, dated April 16, 2024

Attachment 1: Traffic Calming Warrant - Hill Crescent, between Brinloor Boulevard and Duncombe Boulevard

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	No
	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	N/A
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 (230 m)
	85th percentile speed	Minimum 85th percentile speed of 8 km/h over the warranted speed limit OR	Yes (51 km/h)
	95th percentile speed	Minimum 95th percentile speed of 15 km/h over the warranted speed limit	Yes (55 km/h)

Attachment 2: Traffic Calming Warrant - Hill Crescent, between Duncombe Boulevard and Heathfield Drive

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	No
	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	N/A
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 (240 m)
	85th percentile speed	Minimum 85th percentile speed of 8 km/h over the warranted speed limit OR	Yes (48 km/h)
	95th percentile speed	Minimum 95th percentile speed of 15 km/h over the warranted speed limit	No (53 km/h)

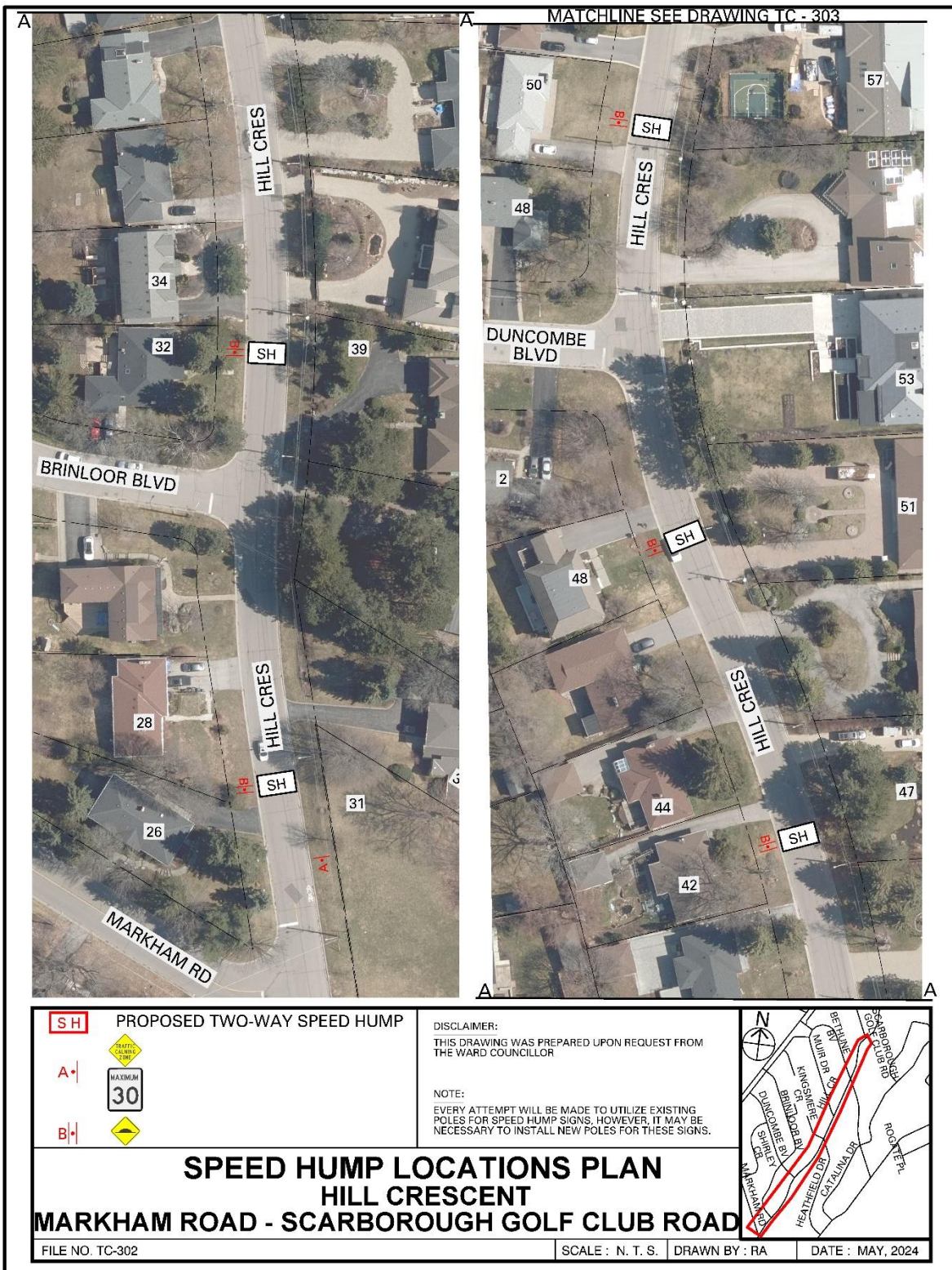
Attachment 3: Traffic Calming Warrant - Hill Crescent, between Muir Drive and Bethune Boulevard

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	No
	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	N/A
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 (200 m)
	85th percentile speed	Minimum 85th percentile speed of 8 km/h over the warranted speed limit OR	Yes (49 km/h)
	95th percentile speed	Minimum 95th percentile speed of 15 km/h over the warranted speed limit	No (54 km/h)

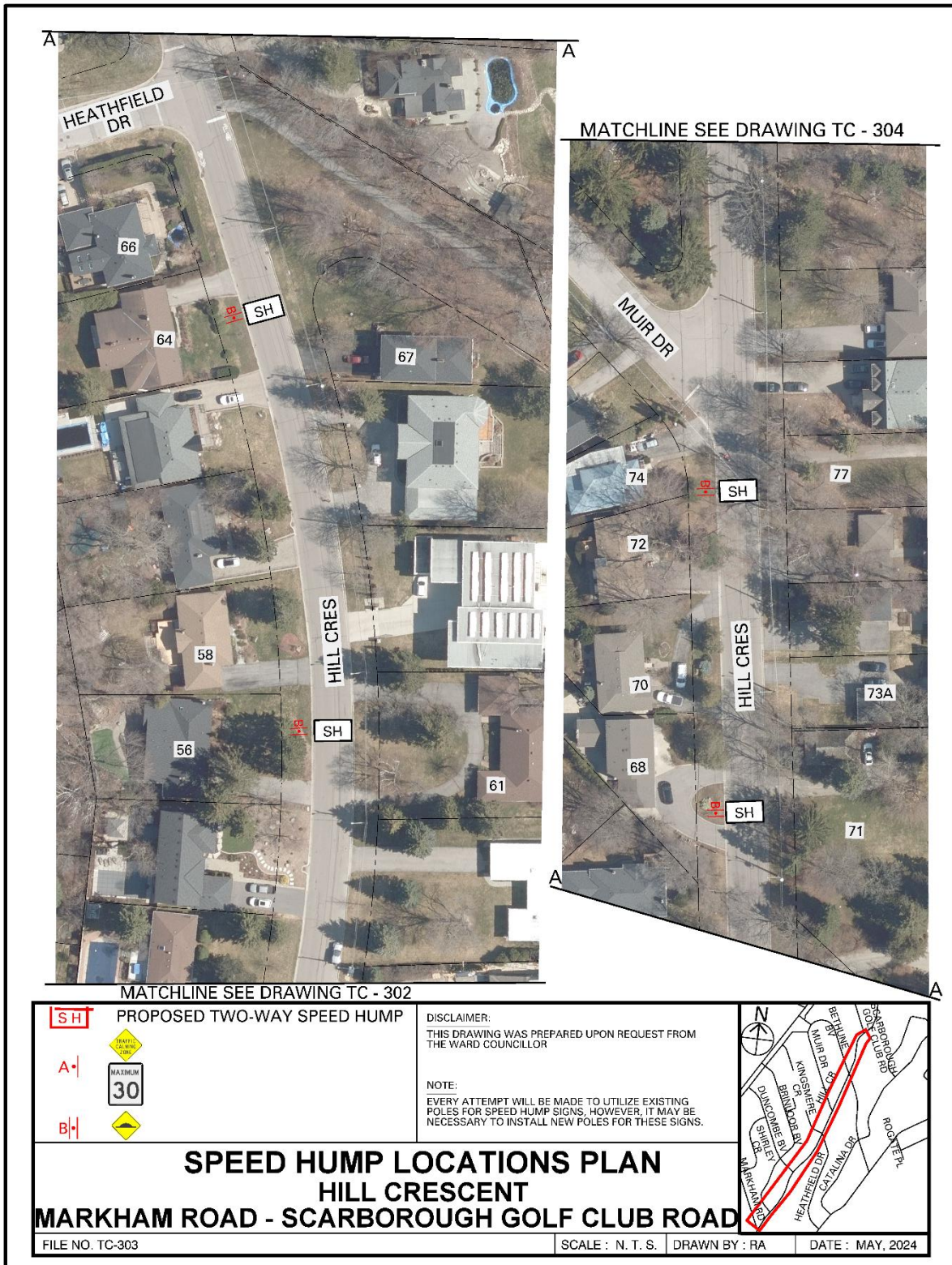
Attachment 4: Traffic Calming Warrant - Hill Crescent, between Bethune Boulevard and Scarborough Golf Club Road

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	No
	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	N/A
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 (210 m)
	85th percentile speed	Minimum 85th percentile speed of 8 km/h over the warranted speed limit OR	No (47 km/h)
	95th percentile speed	Minimum 95th percentile speed of 15 km/h over the warranted speed limit	No (51 km/h)

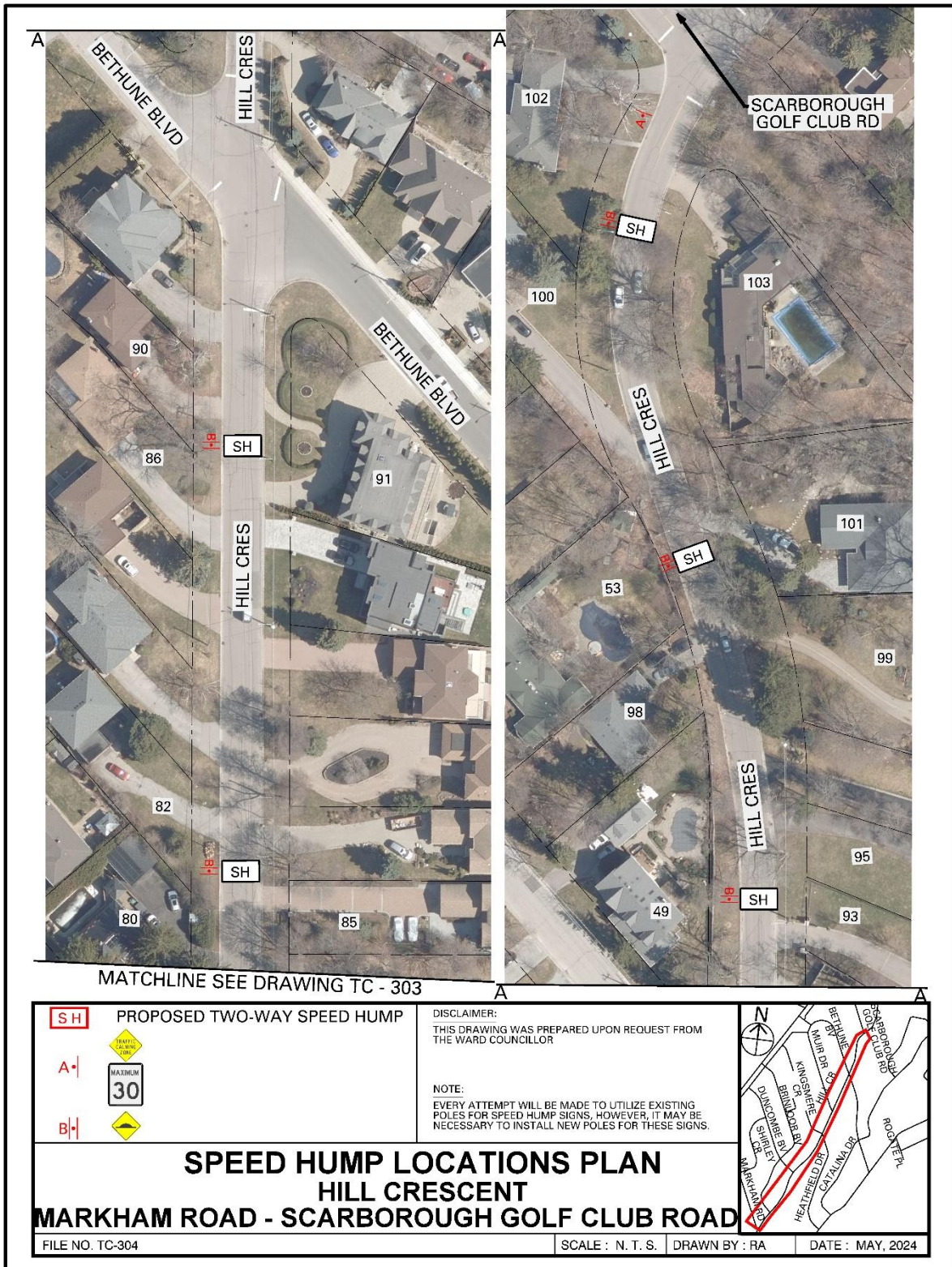
Attachment 5: Speed Hump Locations Plan - Hill Crescent - TC-302 (Matchline, see drawing TC-303)



Attachment 6: Speed Hump Locations Plan - Hill Crescent - TC-303 (Matchline, see drawing TC-304)



Attachment 7: Speed Hump Locations Plan - Hill Crescent - TC-304



Attachment 8: Letter from Toronto Fire Services, dated April 15, 2024



Matthew Pegg
Fire Chief and General Manager

Paul Raftis
Deputy City Manager
Community & Social Services

Fire Services
4330 Dufferin Street
Toronto, Ontario M3H 5R9

Email: OfficeoftheFireChief@toronto.ca

April 15, 2024

Omar Omar
Engineering Technologist Tech 1
City Of Toronto | Transportation Services,
Traffic Operations – Area 1D,
Scarborough Civic Centre,
2nd Floor

RE: Location on Hill Crescent, between Markham Road and Scarborough Golf Club Road

We are in receipt of and have reviewed the proposal for installation of traffic calming measures (speed humps) **on Hill Crescent, between Markham Road and Scarborough Golf Club Road** and provide the following comments.

Toronto Fire Services does not support this proposed speed hump installation as it may negatively impact service delivery. The physical restrictions imposed by speed humps have a greater impact on fire vehicles. Response time increases with every obstacle encountered responding to any emergency incident and the cumulative impact of several speed humps can increase responses times.

Toronto Fire Services is supportive of initiatives that improve safety for all citizens and visitors to the City of Toronto. However, careful consideration must be given to accepting a delay to emergency response vehicles as a compromise to combat the risks presented by all vehicular traffic. Our recommendation is that non-physical measures be considered and evaluated to determine if desired results can be obtained without imposing a physical obstacle to emergency vehicles.

Regards,

Claudio Gloazzo
Acting District Chief
Emergency Planning
Toronto Fire Services
(416) 338-7708



Attachment 9: Letter from Toronto Paramedic Services, dated April 16, 2024

From: [Atif Sharif](#)
To: [Omar Omar](#)
Subject: RE: Speed humps - Hill Crescent between Markham Road and Scarborough Golf Club Road
Date: April 16, 2024 9:07:36 AM
Attachments: [image002.png](#)
[image003.png](#)

Good morning Omar,

We have received and reviewed the proposal for installation of speed humps on Hill Crescent between Markham Rd and Scarborough Golf Club Rd, with the following comments:

Hill Crescent appears to provide access to several residential roadways which branch off the Hill Crescent. Traffic calming measures will potentially impact response times for residents that reside on the roadway in addition to other community members to which the Hill Crescent serves access to. 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.

Thank you,

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

