Traffic Calming - Badgerow Avenue

Date: March 23, 2017  
To: Toronto and East York Community Council  
From: Acting Director, Transportation Services, Toronto and East York District  
Wards: Ward 30, Toronto-Danforth

SUMMARY

This staff report is about a matter that Community Council has delegated authority to make a final decision, provided that it is not amended so that it varies with City policy or by-laws.

Transportation Services staff have reviewed the need for traffic calming on Badgerow Avenue, between Carlaw Avenue and Pape Avenue, to address residents' concerns regarding vehicle speeds. Our assessment indicates the criteria as set out in the traffic calming policy has not been satisfied on this roadway. Therefore, traffic calming should not be installed on Badgerow Avenue, between Carlaw Avenue and Pape Avenue.

RECOMMENDATIONS

The Acting Director, Transportation Services, Toronto and East York District, recommends that:

1. Toronto and East York Community Council deny the installation of traffic calming measures on Badgerow Avenue, between Carlaw Avenue and Pape Avenue.

FINANCIAL IMPACT

There is no financial impact resulting from the adoption of the recommendations in this report.
DECISION HISTORY

Transportation Services, Toronto and East York District, was requested by Toronto & East York Community Council, at its meeting on February 22, 2017 (item TE22.94), to report back to the May 2nd, 2017 Toronto and East York Community Council meeting regarding the installation of speed humps on Badgerow Avenue, between Carlaw Avenue and Pape Avenue.

COMMENTS

Existing Conditions
Badgerow Avenue, between Carlaw Avenue and Pape Avenue, is a local roadway which operates two-way, east-west, with a posted speed limit of 30 km/h. The pavement width is about 8.54 metres and sidewalks are provided on both sides. There is an all-way compulsory stop at the intersection of Badgerow Avenue and Boston Avenue (which is located approximately at the midpoint between Pape Avenue and Carlaw Avenue). The following parking regulations are currently in effect on Badgerow Avenue, between Carlaw Avenue and Pape Avenue:

North Side:
- Parking is prohibited at all times

South Side:
- Parking is permitted for 1 hour, from 8:00 a.m. to 6:00 p.m., Monday to Friday
- Parking by permit only, from 12:01 a.m. to 7:00 a.m., all times

There is no TTC service provided on Badgerow Avenue.

Analysis
Transportation Services conducted a mid-block speed and volume study on Badgerow Avenue, between Carlaw Avenue and Pape Avenue, over a three-day mid-week period in March 2017. It should be noted that the studies are based on the warranted speed limit of 40 km/h.

The study findings were assessed against the City of Toronto's traffic calming policy and it was found that Badgerow Avenue, between Carlaw Avenue and Pape Avenue, did not meet the warrant criteria for the installation of traffic calming devices.
The warrants were evaluated on the following criteria:

**Speed:**
- Badgerow Avenue between Carlaw Avenue and Boston Avenue; the operating (85th percentile) speed was found to be 40 km/h. This is below the minimum of 10 km/h over the warranted speed limit required to satisfy the traffic calming installation criteria

- Badgerow Avenue between Boston Avenue and Pape Avenue; the operating (85th percentile) speed was found to be 43 km/h. This is below the minimum of 10 km/h over the warranted speed limit required to satisfy the traffic calming installation criteria

**Volume:**
- Badgerow Avenue between Carlaw Avenue and Boston Avenue; the daily traffic volume recorded was 810 vehicles. This is below the minimum of 1,000 vehicles per day needed to satisfy the traffic calming installation criteria

- Badgerow Avenue between Boston Avenue and Pape Avenue; the daily traffic volume recorded was 499 vehicles. This is below the minimum of 1,000 vehicles per day needed to satisfy the traffic calming installation criteria

A review of Toronto Police Service collision records for a three-year period ending June 30, 2016 disclosed that one collision occurred on the section Badgerow Avenue, between Carlaw Avenue and Pape Avenue. This collision could not be attributed to excessive speed.

In view of the above, the installation of traffic calming devices on Badgerow Avenue, between Carlaw Avenue and Pape Avenue, is not warranted. Transportation Services does not support the installation of traffic calming measures on Badgerow Avenue, between Carlaw Avenue and Pape Avenue.

Appendix A entitled "Table 1: Traffic Calming Warrant Criteria – Badgerow Avenue" outlines the results of the assessment.

**Alternate Recommendations**
If, despite the findings above, Toronto and East York Community Council determines that installing speed humps on Badgerow Avenue, between Carlaw Avenue and Pape Avenue, would be beneficial, it may approve the following:

"That the Toronto and East York Community Council direct:

1. The Acting Director of Transportation Services, Toronto and East York District request the City Clerk to poll eligible householders on Badgerow Avenue, between Carlaw Avenue and Pape Avenue, to determine whether residents support the installation of traffic calming, in accordance with the City of Toronto Traffic Calming Policy."
2. Subject to favourable results of the poll, the City Solicitor prepare a by-law to alter sections of the roadway on Badgerow Avenue, between Carlaw Avenue and Pape Avenue, for traffic calming purposes, generally as shown on the copy of Drawing No. 421G-2441, dated March 2017, attached to the report entitled 'Traffic Calming – Badgerow Avenue' from the Acting Director, Transportation Services, Toronto and East York District."

The estimated cost for installing three speed humps on Badgerow Avenue, between Carlaw Avenue and Pape Avenue is $9,600.00 and would be available in 2018 budget estimates.

**Conduct Poll**
The City of Toronto's traffic calming policy stipulates that residents who would be directly affected by installing speed humps on Badgerow Avenue, between Carlaw Avenue and Pape Avenue, be formally polled. A minimum response of 50 percent plus one ballot is required, of which at least 60 percent of the respondents must support installing speed humps in order to proceed with the installation. Should Toronto and East York Community Council approve the recommendations outlined above, Transportation Services would request a poll of eligible residents on Badgerow Avenue, between Carlaw Avenue and Pape Avenue. If the poll supports speed humps, Transportation Services would schedule installation based on relative need, competing priorities and funding availability.

**Relative Priority and Other Impacts**
Relative need and priority of speed hump installation is based on a technical assessment of traffic volume, vehicle speed percentages, speed-related collisions, and the presence of schools, parks, seniors’ residences or bicycle routes. Badgerow Avenue, between Carlaw Avenue and Pape Avenue, scored 14 ranking points out of a possible 100.

No alterations to parking regulations are required, nor would 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.

Speed humps will result in slower operating speeds for all vehicles, including emergency service vehicles, and could result in increased response times in the event of an emergency.

**Emergency Services Comments**
Consultation with emergency services (Police, Fire and Paramedic Services) is required to ensure that the design and layout of a traffic calming proposal does not unduly affect their operations. Toronto Fire Services provided their comments in the attached letter, dated March 14, 2017 (Appendix B). Toronto Paramedic Services provided their comments in the attached letter, dated March 20, 2017 (Appendix C). Comments have not yet been received from Toronto Police Services.
Councillor Paula Fletcher has been advised of the recommendations of this staff report.

CONTACT

Ann S. Khan, P. Eng.
Manager, Traffic Operations
Toronto and East York District
Transportation Services
Telephone: (416) 397-5021
Fax: (416) 392-1920
E-mail: Ann.Khan@toronto.ca

SIGNATURE

Dave Twaddle, C.E.T.
Acting Director, Transportation Services
Toronto and East York District

ATTACHMENTS

1. Drawing No 421G-2441, dated March 2017
2. Appendix A - Table 1: Traffic Calming Warrant Criteria (Badgerow Avenue)
3. Appendix B - Letter from Toronto Fire Services, dated March 14, 2017
4. Appendix C - Letter from Toronto Paramedic Services, dated March 20, 2017
# Table 1: Traffic Calming Warrant Criteria

**Badgerow Avenue, between Carlaw Avenue and Pape Avenue**

<table>
<thead>
<tr>
<th>Warrant</th>
<th>Criterion</th>
<th>Requirement</th>
<th>Met/Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Warrant 1</strong></td>
<td>1.1 Petition</td>
<td>A petition requesting traffic calming must be signed by at least 25% of households on the street. OR A direct request from the Ward Councillor. Warrants #1 and #3 will not be considered until Warrant #1 is satisfied.</td>
<td>Met – Requested to investigate by Councillor Fletcher (item YE22.94)</td>
</tr>
<tr>
<td><strong>Impacts to Adjacent Streets</strong></td>
<td></td>
<td>No significant traffic impacts on adjacent streets</td>
<td>Met – There should be no traffic spill-over to adjacent streets</td>
</tr>
<tr>
<td><strong>Warrant 2</strong></td>
<td>2.1 Sidewalks</td>
<td>Continuous sidewalks on at least one side of the street (both sides for collector streets or higher classification) OR Where there are no sidewalks, the installation of sidewalk on at least one side of the street must have first been considered.</td>
<td>Met – There is sidewalk present on both sides of the road</td>
</tr>
<tr>
<td><strong>Safety Requirements</strong></td>
<td>2.2 Road Grade</td>
<td>Road grade 5% or less OR Between 5% and 8% road grade may be considered. Investigation must determine installation to be safe.</td>
<td>Met – The road grade on Badgerow Avenue is less than 5%</td>
</tr>
<tr>
<td><strong>Warrant 3</strong></td>
<td>2.3 Emergency Response</td>
<td>No significant Impacts on Emergency Services - as determined in consultation with Emergency Services (Fire, Ambulance and Police) staff</td>
<td>Comments were requested and have been received from Fire Services and Paramedic Services</td>
</tr>
<tr>
<td><strong>Technical Requirements</strong></td>
<td>3.1 Minimum Speed</td>
<td>85th percentile speed is a minimum of 10 km/h (but less than 15 km/h) over a warranted 40 km/h speed limit, and the traffic volume requirements of Warrant 3.2 must be satisfied. OR On streets where the 85th percentile speed exceeds a warranted 40 km/h speed limit by a minimum of 15 km/h, there is no minimum volume required in warrant 3.2.</td>
<td>Not Met – Speed studies on Badgerow Avenue, between Carlaw Avenue and Pape Avenue, shows an 85th percentile speed of 43 km/h.</td>
</tr>
<tr>
<td><strong>Min. and Max. traffic Volume</strong></td>
<td>3.2 Local Roads</td>
<td>Traffic volume between 1,000 Veh/day and 8,000 Veh/day</td>
<td>Not Met – Badgerow Avenue, between Carlaw Avenue and Pape Avenue is a local road with a traffic volume of approximately 810 vehicles per day.</td>
</tr>
<tr>
<td><strong>Min. and Max. traffic Volume</strong></td>
<td>3.3 Collector Roads</td>
<td>Traffic volume between 2,500 Veh/day and 8,000 Veh/day</td>
<td>Not Met – Distance between stop controls on Badgerow Avenue, between Carlaw Avenue and Pape Avenue does not exceed 120 metres in length.</td>
</tr>
<tr>
<td><strong>Minimum Street Segment Length between stop controls</strong></td>
<td>3.3 Minimum Street Segment Length between stop controls</td>
<td>Street segment length must exceed 120 meters between stop controls (signals or stop signs)</td>
<td>Not Met – No TTC service on Badgerow Avenue, between Carlaw Avenue and Pape Avenue</td>
</tr>
<tr>
<td><strong>Transit Service</strong></td>
<td>3.4 Transit Service</td>
<td>Impacts on regularly scheduled Toronto Transit Commission (TTC) services will not be significant (as determined in consultation with TTC staff)</td>
<td>Met – No TTC service on Badgerow Avenue, between Carlaw Avenue and Pape Avenue</td>
</tr>
</tbody>
</table>
March 14, 2017

Christopher Chahil  
Transportation Services  
Traffic Operations  
Toronto & East District

Badgerow Avenue, between Carlaw Avenue and Pape Avenue - Evaluation for installation of traffic calming devices.

I am in receipt of the proposal for installation of traffic calming measures (speed humps) and provide the following comments.

Toronto Fire Services is supportive of initiatives that will improve the life safety for citizens of, and visitors to the City of Toronto. Our concern is that the physical calming measures being proposed may have negative impacts on emergency response to the area.

Fire Services is opposed to this speed hump installation as they would slow our responding vehicles and affect the delivery of service in the quickest possible manner. The effectiveness of our services is greatly impacted by time. The vertical restrictions imposed by speed humps have a much greater effect on large fire vehicles than smaller passenger vehicles. Response time increase with every obstacle a fire vehicle encounters on route to an emergency incident. Although the increase at each hump may only be seconds, the cumulative effect can be a significant amount of time. A thirty-second response delay (3 to 4 humps) is enough to potentially affect the outcome of an emergency incident.

It is imperative that the individuals directly affected by this installation be made fully aware of the potential negative effects of the proposed calming device. Careful consideration must be given to accepting delays of emergency response vehicles as a compromise to combat the risks presented by all vehicular traffic.

Fire Services recommends that non-physical measures (speed limits or prohibited turns) be implemented and evaluated before physical forms are considered. Desired results may be obtained without imposing a physical obstruction to emergency vehicles. The impact of a speed hump installed in a segment of a street is difficult to evaluate without considering all other existing factors on the surrounding streets.

Regards,

Terry Bruining  
Captain, Emergency Management, Health & Safety  
Toronto Fire Services
March 20, 2017

Mr. Christopher Chahil
Transportation Engineering Technologist
Traffic Operations
Toronto & East York District
416-392-5188

Re: Traffic Calming Measures on Badgerow Avenue, between Carlaw Avenue and Pape Avenue – Evaluation for the installation of traffic-calming measures (i.e. Speed Humps).

Dear Christopher,

I have received and reviewed the proposal for installation of speed humps on Badgerow Avenue, between Carlaw Avenue and Pape Avenue. I have the following comments:

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 neighborhood and we endeavor to support the wishes of the community to implement measures to improve upon these components.

As documented in the Traffic Calming Policy, Toronto Paramedic Services has concerns regarding the usage of traffic calming measures, specifically vertical obstacle measures such as speed humps. These have a negative impact on emergency call response times, travel times to hospital and on patient comfort during transport. This delay is cumulative with each obstacle and can directly impact patient outcome.

Therefore, Toronto Paramedic Services is opposed to the installation of traffic calming devices on Badgerow Avenue, between Carlaw Avenue and Pape Avenue. It is important that the applicant fully understands the potential for delay in emergency response and that alternatives to vertical measures be considered and evaluated.

Yours truly,

Dawn Ainsworth
Superintendent, Toronto Paramedic Services
Planning, Special Events & Emergency Management