Corporation of the Municipality of Brockton

Report to Council

Report Title: Ridout Street Traffic Calming

Prepared By: Nicholas Schnurr, Director of Operations

Department: Operations

Date: May 9, 2023

Report Number: PW2023-11 **File Number:** C11PW

Attachments:

Recommendation:

That the Council of the Municipality of Brockton hereby receives Report Number PW2023-11 – Ridout Street Traffic Calming, prepared by Nicholas Schnurr, Director of Operations for information purposes.

Report:

Background:

Ridout Street, being a busy throughway and a main emergency response route, has received several speeding complaints over the years. There have been concerns raised with pedestrians walking in the travelled portion of the lane, lack of sight lines and observed speeding. At the Brockton Council Meeting on April 25, 2023, Councillor Greg McLean brought forward new business, concerning Ridout Street and the speeding issue. It was the will of Council to address the issue at the May 9, 2023 meeting. While this is an important issue, the timeline was insufficient to collect new and updated speeding data for the May 9th meeting.

Staff have reviewed speed data collected throughout 2019 and 2020. The data is consistent and provides 85th percentile speeds from 44 km/h to 57 km/h. The 85th percentile speed is the speed at which 85 percent of vehicles travel or less. This is the benchmark that allows for consistent design, while removing the percentage of vehicles that will not adhere to the speed limit, regardless of improvements the road authority makes or enforces. The technical industry standard tolerance for the 85th percentile speed is 10 km/h within the posted speed limit. Multiple data collections at the location of concern show that the speeds are consistent with the design of the road and that the appropriate posted speed is currently in effect.

While the road is designed for a posted speed of 50 km/h and is proven to be functioning as designed, further analysis is noted below.

Traffic Calming Analysis

The term “traffic calming” describes tactics used to obstruct, channel, divert and slow traffic. This also includes emergency response and year round maintenance vehicles. Various potential methods are analyzed herein.

Traffic calming is important and occasionally necessary to achieve a safe and effective transportation network to effectively move people, vehicles and goods. Traffic calming is best applied in such a way as to encompass a neighbourhood and all the streets throughout each neighbourhood. An effective traffic calming plan can provide for safer neighbourhoods, slowed traffic and lengthened emergency response times for police, fire and EMS. To implement such traffic calming in a town the size of Walkerton, would come with high yearly costs and require additional staff members to implement. Additional maintenance costs would also be incurred for winter and summer maintenance as well as equipment upgrades on a yearly basis.

Stop Signs

According to the Ontario Traffic Manual, Book 5 – Regulatory Signs, it is considered an inappropriate use of an all-way stop for the purposes of traffic calming. In this case, if stop signs were to be used on Ridout, it is an inappropriate use and could expose the municipality to unwarranted risk and liability.

Lane Narrowing, Lane Alterations

The use of lane narrowing or alterations can take several approaches, from visual lane narrowing to removing asphalt, to installing barriers that obstruct traffic and require vehicles to slow down to an undesirable speed to navigate the obstructions. This option may impede truck, fire and EMS traffic altogether, depending on the design and the goals wished to be achieved.

Permanent Speed Bumps, Humps, or Tables

While being one of the most effective options for reducing speeds, this option slows all traffic, however does not reduce the lane width, but has significant drawbacks. The main drawback, aside from lengthening emergency response times and unwanted noise pollution, is maintenance. During winter maintenance, plows have difficulty navigating these devices, which vertically alter the road surface. During spring and summer, the street sweeper has little ground clearance and staff have noted that the sweeper would be unable to navigate these devices.

Non-Permanent Speed Bumps

The municipality has previously installed a non-permanent speed bump at this location. While this had some effect, the speed bump requires approximately 50 holes being drilled into the asphalt surface for each year of installation. This method reduces the overall life of the asphalt, by opening up the surface to water, moisture and frost. While being a cost effective option in the short term, it will ultimately add additional road repair costs in the future. Additionally, emergency responders raised concerns with the speed bump, causing vertical shifts in the route, bringing discomforts to patients on route to the hospital. The unit was not reinstated due to these concerns.

The unit that was previously installed on Ridout has been and will be deployed in Lobies Park, working very successfully. Being used on the gravel drive in Lobies, there are no unfavourable results at that location and it serves it’s intended use to slow traffic in this area.

Radar Speed Display Devices

Council is aware of this measure currently being used in Chepstow and Cargill with permanent installations. This measure is proven to only be effective for a period of three to five days, unless accompanied by regular police enforcement. It has even been known to increase speeds and encourage street racing in some circumstances. A temporary installation of no more than two weeks, with monitoring may provide some reduction of speeds on Ridout Street.

Painted Road Markings

Paint applied road markings can be a cost-effective way to achieve some level of traffic calming. In the case of Ridout Street, it is strongly advised that a "bike lane" or "walking lane" not be instated with the use of paint on the current road surface. A reconstruction of the road to widen and incorporate a bike and/or pedestrian lane would be required to incorporate this measure.

The use of painted road markings could be used to achieve visual lane narrowing, transverse bars or dragons teeth. These measures are strictly visual and do not impede traffic or emergency response, although they have very limited effect. While slowing traffic, they will not provide a dedicated walking lane.

Reducing the Posted Speed Limit

Caution is advised when using this measure for the purposes of traffic calming. This option opens the municipality to unnecessary risks and potential liabilities. In the case of Ridout Street, the speed data points to the original road design being one hundred percent (100%) effective for the posted speed limit. As noted above, the 85th percentile is well within the 10 km/h standard tolerance. Changing the posted speed limit without altering the existing road, either horizontally or vertically, will do little or nothing to driver's travelling speeds. Reducing the posted speed limit will create a speeding problem that will ultimately be difficult to enforce.

Oversized Signage

This measure can take several approaches, from oversized posted speed limit signs, "WATCH FOR PEDESTRIANS" to "NO PEDESTRIAN TRAFFIC".

<u>Analysis</u>:

Speeding is often a perceived problem and is only properly assessed by methodically collecting and analyzing traffic data and following standard processes. It is important to differentiate between the perceived and actual. Actual speeding in this case is defined by the data collected from the Black Cat Radar and analysed according to the design of the road. In the case of Ridout Street, the speeding is indeed a perceived problem. The main issue as noted at the previous Council Meeting is that residents continue to walk down the travelled portion of the road with no consideration for their own safety. Regardless of whether the issue is perceived or actual, it causes residents to feel unsafe and look to council for answers. By the design of the road, the current travelled speeds are within limits, however, the road is not designed for residents to walk on. The road is a designated Urban Collector throughway in Walkerton and was designed to move vehicles with little restriction, including emergency response units. Introducing restrictive measures may also introduce undesirable consequences.

To accommodate foot traffic, a sidewalk would need to be constructed. In the current design, there are hydro poles on one side of the street and communications polls on the other, each too close to the road to allow sidewalk construction. The other restriction is the culvert structure that is not long enough to accommodate additional width at the road surface level. The ultimate solution is to redesign and reconstruct Ridout Street and include a sidewalk in the reconstructed roadway. The incorporation of sidewalks in the future developments in this area has already been established as a priority and will advance in the future.

As the town of Walkerton continues to expand and grow, the need for a comprehensive, town wide traffic study increases. At this time, staff recommend to continue to collect updated data and bring forward a recommendation with that data at a future Council Meeting.

Strategic Action Plan Checklist:

What aspect of the Brockton Strategic Action Plan does the content/recommendations in this report help advance?

- Recommendations help move the Municipality closer to its Vision — Yes
- Recommendations contribute to achieving Heritage, Culture, and Community — N/A
- Recommendations contribute to achieving Quality of Life — Yes
- Recommendations contribute to achieving Land Use Planning and the Natural Environment — N/A
- Recommendations contribute to achieving Economic Development — N/A
- Recommendations contribute to achieving Municipal Governance — N/A

Financial Impacts/Source of Funding:

- Do the recommendations represent a sound financial investment from a sustainability perspective? N/A

Reviewed By:

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Respectfully Submitted by:

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Reviewed By:

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