



Subject: Traffic Advisory Committee Stop Sign Recommendations

Report Number: CS-23-18

Committee Name: Traffic Advisory Committee

Submitted by: Julie Ellis, Deputy Clerk and Richard Sparham, Manager of Public Works

Meeting Type: Council Meeting

Meeting Date: Monday, October 23, 2023

RECOMMENDATION

- A. THAT report titled "CS 23-18 Traffic Advisory Committee Stop Sign Recommendations" be received as information; and
- B. THAT Council approve the recommendation of the Traffic Advisory Committee as follows:

THAT the Traffic Advisory Committee recommends to Council the installation of an all-way stop at the following locations, subject to updating By-Law 2022-011 A by-Law to regulate traffic and parking of motor vehicles"

- *Brock Street West and Bidwell Street;*
- *Rolph Street and Bear Street;*
- *Ridge Boulevard, Goldenrod Drive and Thistle Court; and*
- *Christie Street and Allen Street; and*

THAT a notice period of 60 days be given to the Tillsonburg District Memorial Hospital of the above changes to Rolph Street and Bear Street, and

- C. THAT a By-law be presented to Council for consideration to effect the following:
- i. To approve the Bidwell Street and Brock Street West to all-way stop control, subject to an approved updated by-law received for the November 6th Council meeting
 - ii. To approve the Rolph Street and Bear Street to all-way stop control, subject to an approved updated by-law received for the November 6th Council meeting
 - iii. To approve that Ridge Boulevard, Goldenrod Drive and Thistle Court be changed to an all-way stop control, subject to an approved updated by-law received for the November 6th Council meeting; and
 - iv. To approve the Christie Street and Allen Street all-way stop control

BACKGROUND

At the September 28th, 2023 Traffic Advisory Committee Meeting, Richard Sparham, Manager of Public Works, presented a verbal report regarding recommendations for three stop sign locations. An additional stop sign location, Christie Street and Allen Street, was proposed by correspondence from a Tillsonburg resident. The following four locations for a stop sign were proposed by the Traffic Advisory Committee:

- *Brock Street West and Bidwell Street;*
- *Rolph Street and Bear Street;*
- *Ridge Boulevard, Goldenrod Drive and Thistle Court; and*
- *Christie Street and Allen Street*

A letter was sent to the President and Chief Administrative Officer of the Tillsonburg District Memorial Hospital regarding the proposed stop sign at Rolph Street and Bear Street.

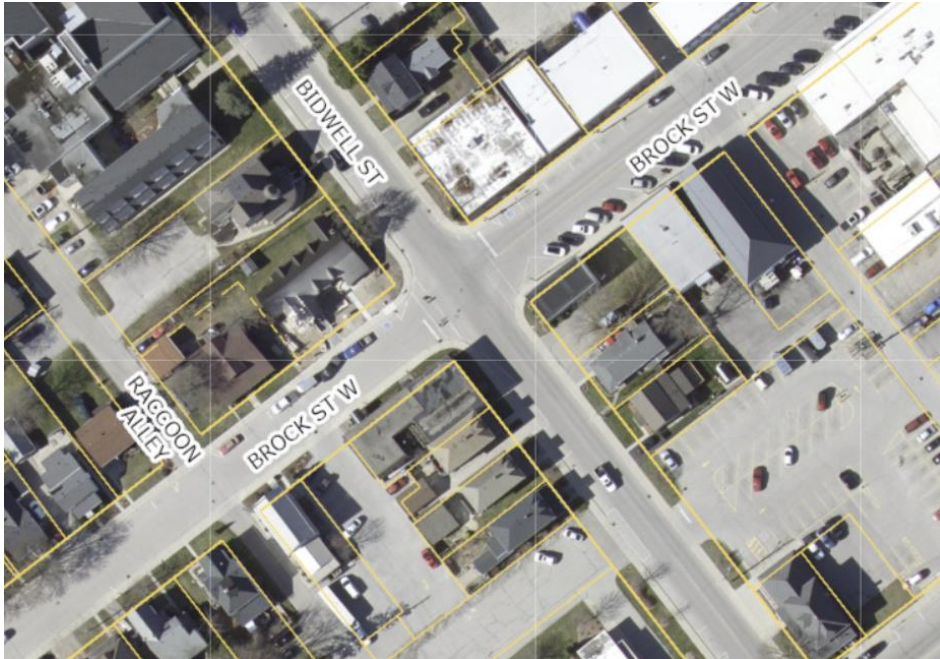
DISCUSSION

Pursuant to the presentation to the Traffic Advisory Committee, the overall summary of each intersection with the recommended improvements are as follows:

Brock Street West and Bidwell Street

Staff have received concerns of safety concerns and apparent “near-misses” of collisions at the intersection of Bidwell Street and Brock Street West. Further, when discussing this location with operations staff, staff was well aware of the safety concerns at this locations as well.

The intersection of Bidwell Street and Brock Street West is located just west of Broadway Street in the downtown core. The intersection is controlled by two-way stop control to Brock Street West with Bidwell Street with no stop controls in place. The photo below shows the layout of the intersection, as described:



Intersection layout – Bidwell Street and Brock Street West

Bidwell Street is a two lane, two-way local class 4 (500-4,000 vehicles/day) road travelling north/south. North of the intersection, Bidwell Street allows for on-street parking along the west side. In the past, two on-street parking were removed to permit a better view of the approaching traffic from vehicles entering from the west leg of Brock Street.

Brock Street West is a two lane, two-way local class 4 road travelling east/west. West of the intersection at Bidwell Street, Brock Street West allows on-street parking along the north side. East of the intersection, on-street parking is permitted on both the north and south sides of the road with parallel on-street parking on the north side and diagonal parking on the south side.

The primary concern at the intersection of Bidwell Street and Brock Street West is the view of approaching traffic from the east leg of Brock Street West due mainly to the encroachment of the two buildings on the northeast and south east corners of the intersection which significantly impacts the sight distance of the vehicles travelling on Bidwell Street.

Accepted traffic engineering principles dictate the required safe sight distance for the intersection to be 95 metres; the determined sight distance is approximately 30 metres. The phot below best demonstrates the view at the intersection:



Sight distance view – Westbound on Brock Street West at Bidwell Street

Although staff does not have access to historical collision data at this intersection, we fully believe the lack of safe sight distance and concerns brought forth from residents to be valid.

Staff recommends the intersection of Bidwell Street and Brock Street West to be elevated to All-way Stop Control with the installation of stop signs to Bidwell Street appropriately

Rolph Street and Bear Street

The intersection of Rolph Street and Bear Street is of a layout which does not conform to typical traffic engineering and control standards and is in need of altered control.

The intersection of Rolph Street and Bear Street is located adjacent to the Tillsonburg Memorial Hospital. The intersection is a three-legged or “T” intersection with Rolph Street as the through (main) street and Bear Street as the minor street. The intersection is stop sign controlled facing Rolph Street with Bear Street with no stop sign control.

The generally accept methods of stop controls at “T” intersections through stop signs is either stop control at the “minor” street of all-way stop control. The stop control of the primary through street, in this situation, is unusual and would be unexpected by

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motorists and can be confusing and therefore potentially unsafe. The photo below depicts the intersection layout:



Intersection layout – Rolph Street and Bear Street

Staff is recommending the intersection stop control be elevated to an all-way stop control arrangement. As stated, the design would be safer as it would conform to expectations of motorists.

It is understood this location was discussed many years ago as Emergency Services was concerned of ambulance access to the hospital. Although staff understands their concerns, ambulances would still require to slow down to navigate the 90 degree turn from Bear street onto Rolph Street where they need to travel approximately 200 feet to the access into the emergency area of the hospital. As we are well aware, emergency vehicles with or without the stop control are required to navigate with care and safety.

As recommended by the Traffic Advisory Committee, the Hospital as well as Emergency Services personnel have been contacted to obtain their comments or concerns. At the time of this report, staff has not received their comments.

Ridge Boulevard, Goldenrod Drive and Thistle Court

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In similarity to the intersection of Rolph Street and Bear Street, Ridge Boulevard, Goldenrod Drive and Thistle Court is of a layout which does not conform to typical traffic engineering and control standards and is in need of altered control.

The intersection of Ridge Boulevard, Goldenrod Drive and Thistle Court is located in the neighbourhood south of Baldwin Street and west of Quart Town Line. The intersection (see photo below) is a three-legged or “T” intersection which the Ridge Boulevard to Goldenrod Drive turn as the primary traffic route.



Intersection layout – Ridge Boulevard, Goldenrod Drive and Thistle Court

Thistle Court, the street opposite Ridge Boulevard is a low volume cul-de-sac which only services nine residential properties and is stop controlled at the intersection.

As stated, the generally accept methods of stop controls at “T” intersections through stop signs is either stop control at the “minor” street of all-way stop control. The stop control of the primary through street, in this situation, is unusual and would be unexpected by motorists and can be confusing and therefore potentially unsafe, especially in this layout where Ridge Boulevard is the only street without stop control.

Staff is recommending the installation of stop control to Ridge Boulevard traffic, thus creating an all-way stop controlled intersection.

Although we have no collision history available and it is a low volume intersection, the increased stop control at the intersection follows standard practices and makes the intersection as motorists would expect it to be.

Allen Street and Christie Street

The Traffic Advisory Committee requested staff input on the possibility of all-way stop control at the intersection of Allen Street and Christie Street. Pursuant to this request, staff provides the following assessment:

Allen Street is a two-lane, two way local road which is considered a Class 4 (500-4,000 vehicles/day) north of the intersection and a Class 5 (50-500 vehicles/day) south of the intersection of Christie Street.

Christie Street is also a two-lane, two way local class 4 road approximately 100 metres in length connecting Broadway Street to Allen Street.



Intersection layout – Allen Street and Christie Street

Last year, a concern of traffic at the intersection of Allen Street and Christie Street with a request to consider an all-way stop at the intersection.

Staff completed traffic counts at the intersection and performed an All-Way Stop Warrant analysis for the intersection, which the volumes portion of the warrant did not fully satisfy the requirements if the warrant analysis.

The all-way “Stop” sign control warrant is a fundamental tool used to determine whether an intersection, with one or two approaches controlled by ‘Stop’ signs, is operationally suitable to be converted to an intersection with right-of-way controlled by ‘Stop’ signs on all approaches. The all-way “Stop” warrant factors include collisions as well as vehicular and pedestrian activity into assessing the intersection as a candidate for all-way stop control.

The traffic volume at the intersection are as follows:

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Traffic Data	
Max Speed	70 km/h
85 th percentile speed	48 km/h
AADT	146 vpd
Total Volume	1,000 vpd

Allen Street

Traffic Data	
Max Speed	54 km/h
85 th percentile speed	39 km/h
AADT	341 vpd
Total Volume	1,700 vpd

Christie Street

Traffic Data	
Max Speed	80 km/h
85 th percentile speed	48 km/h
AADT	163 vpd
Total Volume	950 vpd

Although the traffic volume warrant did not satisfy the warrant, staff has concluded other mitigating factors should be taken into consideration when determining a recommendation for all-way stop control:

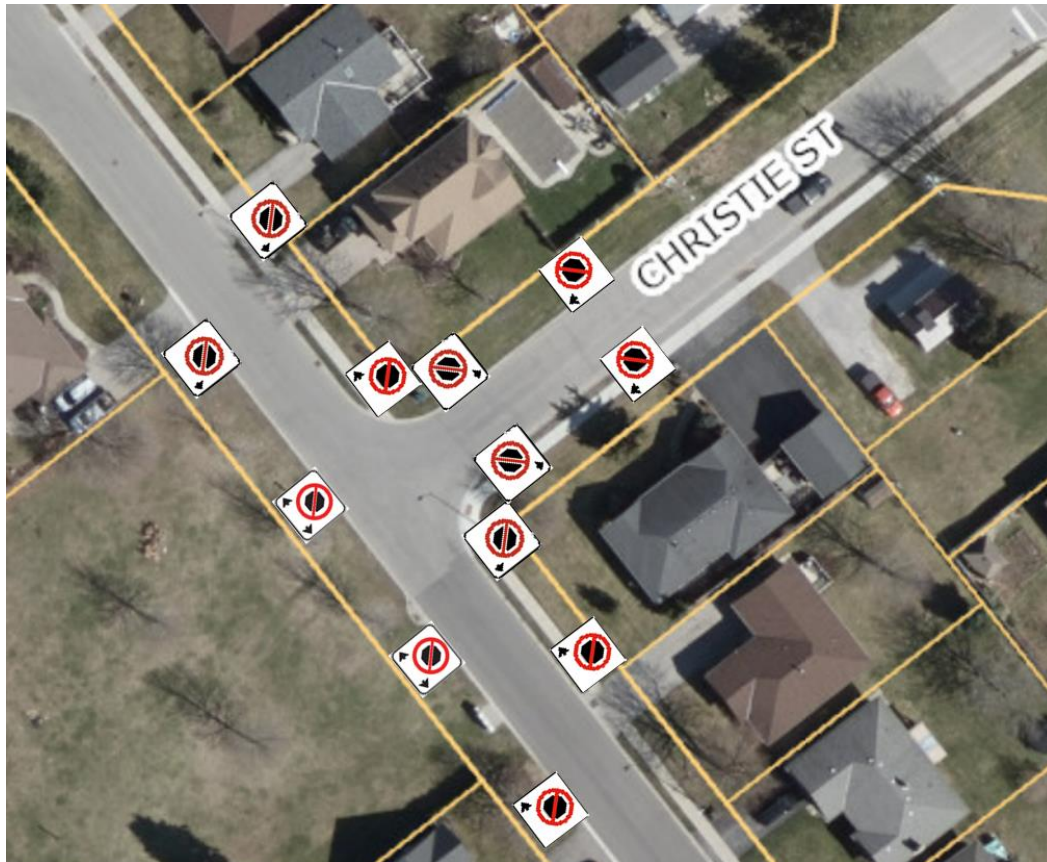
1. **Collision Warrant** – staff does not have access to the collision history at this intersection at this time. Based upon the road classification (local), 2 collisions per year would satisfy the warrant.
2. **Environmental Factors:** the adjacent property uses as well as roadway connections can play a factor into determining the candidacy.

Overall, the environmental factors have played a significant role in staff considering the intersection for all-way stop control.

- Christie Street is a direct connection to Broadway Street, with Broadway Street being a primary access into town and a higher volume, higher speed roadway.
- Allen Street is often used by traffic as an access to nearby Glendale High School
- Glendale Park located at the intersection directly opposite Christie Street

In summary, staff has concluded the intersection of Allen Street and Christie Street to be a candidate for installation of all-way stop control, primarily due to its close proximity to Glendale Park as parks, especially with playground equipment such as Glendale Park, with the presence of young children playing, signifies the need to increase the safety of the intersection.

Further, staff is also recommending changes to the current on-street parking at the intersection as follows:



Upon approval, Council will be provided with the by-law amendments required to satisfy the parking restrictions required for the all-way stop installations at the next Council meeting on November 6th, 2023.

CONSULTATION

The following staff and resources have been consulted in preparing this report:

- Director of Operations and Development
- Traffic Advisory Committee of September 28th, 2023
- Chief Building Official/Manager of By-law Enforcement

FINANCIAL IMPACT/FUNDING SOURCE

All approved recommendations will be covered under the current Public Works operating budget.

CORPORATE GOALS

How does this report support the corporate goals identified in the Community Strategic Plan?

- ☐ Lifestyle and amenities
- ☐ Customer service, communication and engagement
- ☐ Business attraction, retention and expansion
- ☐ Community growth
- ☐ Connectivity and transportation
- ☒ Not Applicable

Does this report relate to a specific strategic direction or project identified in the Community Strategic Plan? Please indicate section number and/or any priority projects identified in the plan.