

**Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works –
March 3, 2020**

REPORTS

**Item No. 18 Traffic Study – Appleford Gate between Brace Bridge Road and
Bison Drive
(Waverley West Ward)**

STANDING COMMITTEE DECISION:

The Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and received the report as information.

**Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works –
March 3, 2020**

DECISION MAKING HISTORY:

Moved by Councillor Santos,

That the recommendation of the Winnipeg Public Service be concurred in.

Carried

STANDING COMMITTEE RECOMMENDATION:

On September 12, 2019, Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service, as amended, and approved the following:

1. That the Winnipeg Public Service report back to the Standing Policy Committee on Infrastructure Renewal and Public Works on the types of traffic calming measures recommended for Appleford Gate within 180 days.

ADMINISTRATIVE REPORT

Title: Traffic Study – Appleford Gate between Brace Bridge Road and Bison Drive

Critical Path: Standing Policy Committee on Infrastructure Renewal and Public Works

AUTHORIZATION

Author	Department Head	CFO	CAO
D. Patman, P.Eng.	J. Berezowsky	N/A	D. Wardrop, Acting Interim CAO

EXECUTIVE SUMMARY

A warrant for traffic calming on Appleford Gate between Brace Bridge Road and Bison Drive for the purpose of mitigating speed was previously established in a September 12, 2019 report. This current report considered the Transportation Association of Canada (TAC) measures suitable for addressing traffic speed concerns through traffic calming. This resulted in the development of two conceptual traffic calming options:

Option 1: Speed tables on Appleford Gate

Option 2: Chicane, curb extensions, and a raised crosswalk on Appleford Gate

These options will need to be reviewed with Street Maintenance, Emergency Services, the Area Councillor, and potentially fronting residents prior to selecting a preferred option. Subsequently, the preferred option can be developed into a costed design and then prioritized amongst other projects within the Traffic Engineering Improvements Program based on the available budget and City-wide priorities.

RECOMMENDATIONS

1. That this report be received as information.

REASON FOR THE REPORT

On September 12, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service, as amended, and approved the following:

1. That the Winnipeg Public Service report back to the Standing Policy Committee on Infrastructure Renewal and Public Works on the types of traffic calming measures recommended for Appleford Gate within 180 days.

IMPLICATIONS OF THE RECOMMENDATIONS

There are no implications to receiving this report as information

HISTORY/DISCUSSION

BACKGROUND INFORMATION

On September 28, 2018, the Riel Community Committee recommended to the Standing Policy Committee on Infrastructure Renewal and Public Works to direct the Winnipeg Public Service to conduct a traffic study on Appleford Gate, to look at the installation of speed tables. The reasons stated for the request were:

- There is a large park in the Bridgwater Lakes area.
- Many people tend to speed as they drive by the park.
- The committee would like to ensure that there is safe access to the park.

On November 20, 2018, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Riel Community Committee and directed the Winnipeg Public Service to conduct a traffic and speed study on Appleford Gate, to look at the installation of speed tables, and report back to the Standing Committee within 120 days. Subsequent extensions of time were granted for this report.

On September 12, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works considered a Public Service report indicating that a warrant for traffic calming on Appleford Gate between Brace Bridge Road and Bison Drive for the purpose of mitigating speed had been established. The September 2019 report indicated that a subsequent report, this report, be presented to the Standing Policy Committee on the types of traffic calming measures recommended for Appleford Gate once the Public Service completes its trial evaluation of speed tables.

CURRENT TRAFFIC CONDITIONS

Appleford Gate is a two-lane undivided residential collector street with a speed limit of 50 km/h. Parking is permitted on the east side of the street and appears to have a low, but not insignificant, level of use. The roadway width is approximately 10 metres, there is a sidewalk on the east side, and a multi-use pathway on the west side of the street. Roundabouts are provided at the intersection of Appleford Gate and Bison Drive, and at the intersection of Appleford Gate and Brace Bridge Road. The average weekday traffic volume on Appleford Gate is 1,440 vehicles per day, which is low for a collector street. Traffic volumes are expected to increase as development continues. Appleford Gate is illustrated in Figure 1, below.

The east side of Appleford Gate has single-family homes that are served by back lane access. The west side has a pathway network, playground, basketball court, and other recreational facilities. Winnipeg Transit does not currently operate on Appleford Gate. The surrounding neighbourhood is still under development and new homes and streets are being constructed in the area. The west side off-street multi-use pathway on Appleford Gate is included in the current Pedestrian and Cycling Strategies map.

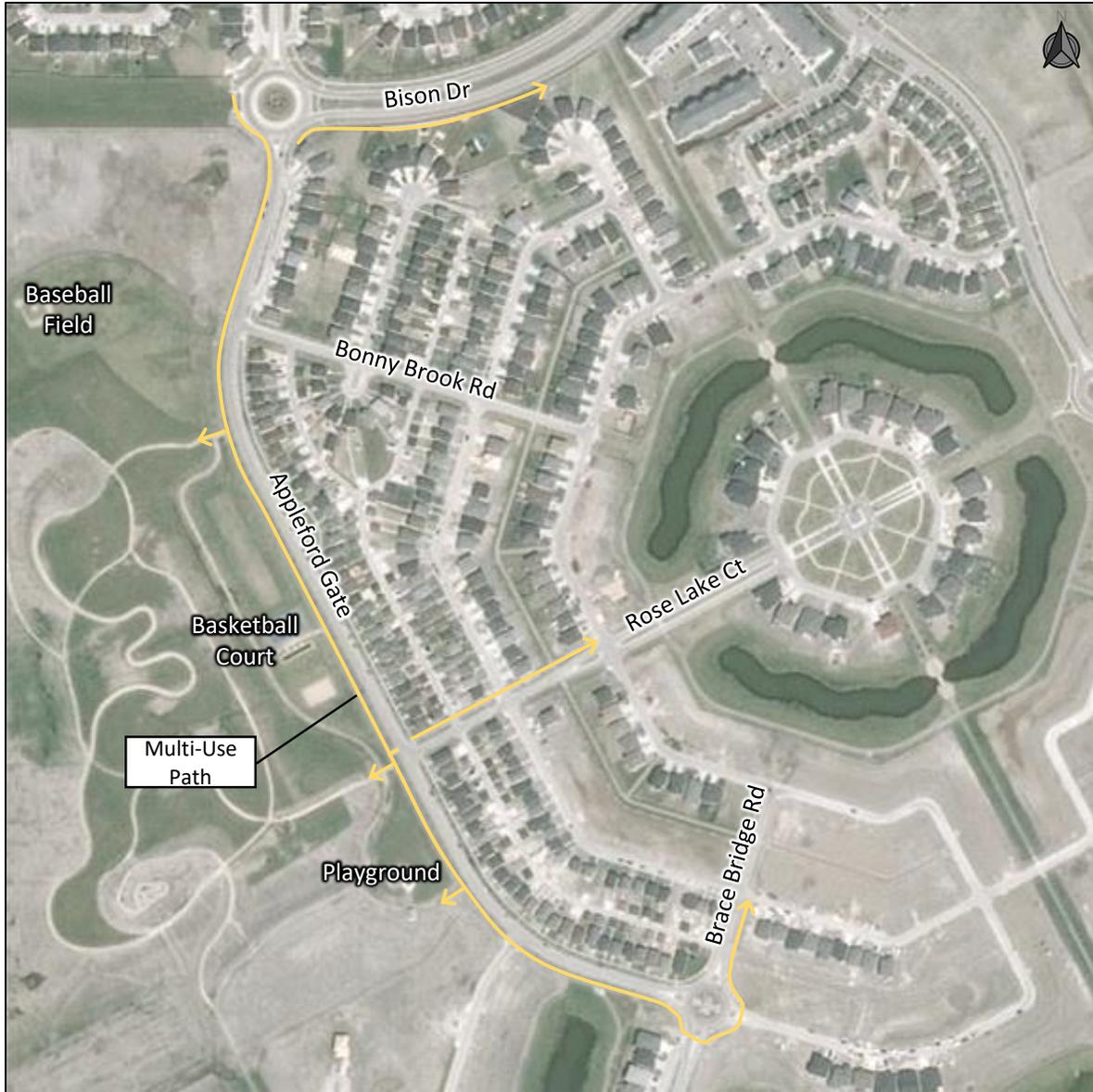


Figure 1: Study Area

Results of the speed study in the September 2019 report indicate that the 85th percentile speed reached 55 km/h and the average speed reached 47 km/h on the straight section of Appleford Gate between Rose Lake Court and Bonny Brook Road. Eighteen percent (18%) of vehicles travelled 55 km/h or higher, and 6.3% of vehicles travelled 60 km/h or higher. These speed results merited consideration of traffic calming treatments for Appleford Gate.

TRAFFIC CALMING CONSIDERATIONS

The speed data confirms that vehicle speeds on Appleford Gate are at a level that warrant consideration of traffic calming. The Transportation Association of Canada (TAC) *Canadian Guide to Traffic Calming Second Edition* notes the following with regards to reducing vehicle speeds:

“Traffic calming measures are implemented to increase motorists’ awareness of the street’s function and thereby reduce vehicular speeds. Some features make it physically uncomfortable or difficult to travel along a street without reducing speed. Excessive speeds increase risk and create a safety concern, as motorists are less able to stop safely if confronted with situations, such as a child running into the street, a vehicle backing out of a driveway, or a cyclist swerving around an obstacle. Excessive vehicle speeds also increase the severity of a collision should one occur. Overall, speeding vehicles can detract from the livability of a neighbourhood...”

According to the *Canadian Guide to Traffic Calming Second Edition* there are numerous beneficial measures available for reducing vehicle speeds. The primary categories of available measures are:

- Vertical deflection – This group of measures includes raised crosswalks, raised intersections, and speed tables. All these measures have been applied at other locations in Winnipeg. Speed tables have proven effective in other locations and a raised crosswalk is an option for the multi-use path crossing of Appleford Gate on the north side of Rose Lake Court.
- Horizontal deflection – This group of measures includes chicanes, traffic circles, and mini-roundabouts. Chicanes have not yet been applied in Winnipeg and Appleford Gate may provide an opportunity to test their effectiveness. Traffic circles and mini-roundabouts are not favoured on Appleford Gate due to the large intersection spacing.
- Roadway narrowing – This includes measures such as curb extensions and raised median islands. A curb extension could enhance pedestrian/cyclist visibility, reduce crossing distance, and slow traffic at the intersection of Appleford Gate and Rose Lake Court.
- Directional closure – This would involve either closing southbound Appleford Gate at Bonny Brook Road or northbound Appleford Gate at Rose Lake Court. This would have a significant impact on resident access and access to green space and would increase traffic on local residential streets and is therefore not recommended.

Considering available measures to address speed, two potential traffic calming options were explored. The two options are described below.

Option 1: Speed Tables on Appleford Gate

Option 1 would see five speed tables introduced on Appleford Gate (Figure 2, below). The tables are spaced at roughly 125-metre intervals as per City guidelines. This option could be staged with the middle three speed tables installed between Bonny Brook Road and Rose Lake Court initially, and then a fourth or fifth speed table added to the north or south if desired speeds are not achieved along the full length of Appleford Gate. Where possible, the speed tables are near streetlights. Option 1 also proposes a curb extension in the northeast corner of the Appleford Gate and Rose Lake Court intersection to improve pedestrian and cyclist visibility, decrease pedestrian and cyclist crossing distance, and narrow the roadway to reduce the speed at the multi-use path crossing.

Advantages

- Speed tables have proven to be effective measures to reduce speeds in the City of Winnipeg. TAC indicates an 85th percentile speed reduction between 6 and 13 km/h.
- The speed tables will not affect roadway drainage. A curb extension at Rose Lake Court may affect drainage.

- No negative effect to cyclists on Appleford Gate from speed tables. The proposed curb extension narrows the roadway for cyclists, but the effect is similar to a parked car.

Disadvantages

- May have a negative effect on emergency services. It would be critical to involve emergency services if speed tables are given further consideration.
- Removes some parking – though parking demand is generally low.

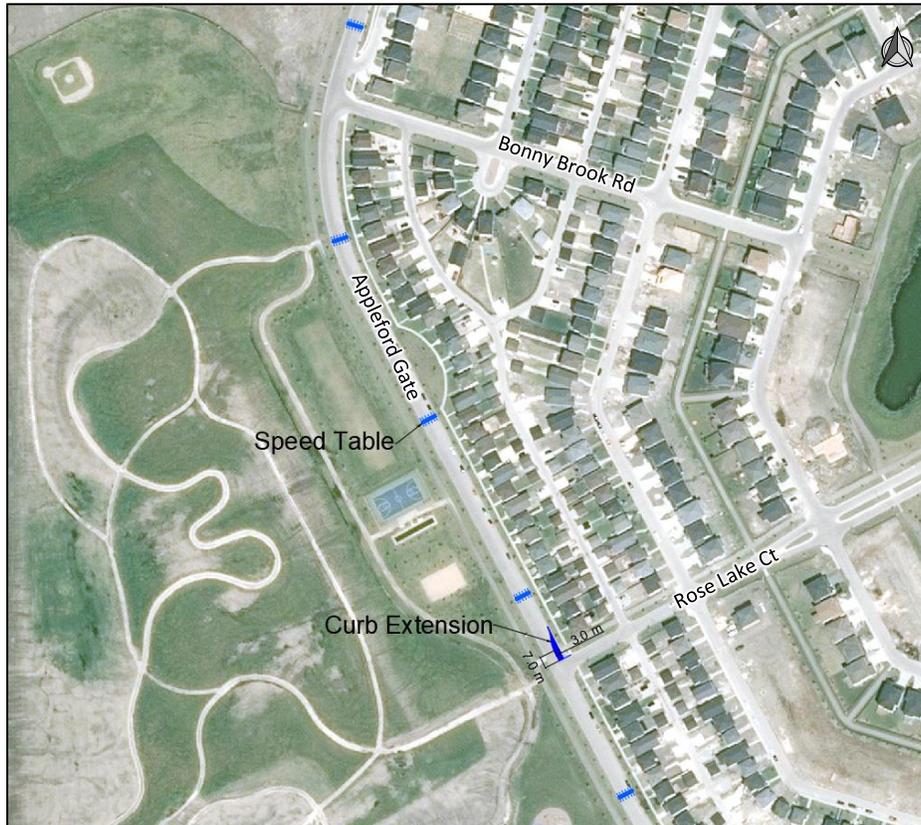


Figure 2: Option 1 – Speed Tables and Curb Extension

Option 2: Chicane, Curb Extension, and Raised Crosswalk on Appleford Gate

Option 2 would see a two-lane chicane installed midblock on Appleford Gate between Bonny Brook Road and Rose Lake Court and a curb extension and raised crosswalk installed on the north side of the Appleford Gate and Rose Lake Court intersection (Figure 3, below). A chicane is a series of curb extensions on alternating sides of a roadway, which narrow the roadway and require drivers to steer from one side of the roadway to the other to travel through the chicane. The proposed chicane on Appleford Gate would have a seven-metre-wide path of travel through the chicane and would leave gaps between the curb extension and the curb for drainage. At Rose Lake Court, the curb extension would be like Option 1 but would be supplemented by a raised crosswalk that would provide vertical deflection to slow vehicles in a fashion similar to a speed table.

Advantages

- TAC indicates a reduction in vehicle speed of between 6 and 11 km/h for a two-lane chicane.

- Combination of curb extension and raised crosswalk provides a high-quality crossing facility for pedestrians and cyclists at Rose Lake Court that may eventually become a signed and marked crosswalk.
- Chicane does not affect roadway drainage.

Disadvantages

- May have a negative effect on emergency services. It would be critical to involve emergency services if this measure is given further consideration.
- Chicane would have a negative effect on snow clearing and street sweeping.
- Narrows the roadway for cyclists on Appleford Gate.
- Removes some parking (particularly at the chicane) – though parking demand is generally low.
- Chicane feature is untested in Winnipeg.



Figure 3: Option 2 – Chicane, Curb Extension, and Raised Crosswalk

In order to choose between Option 1 and Option 2, external input is required. The next steps would be to review both options with Street Maintenance, Emergency Services, the Ward Councillor, and potentially fronting residents prior to selecting a preferred option.

Once an option is selected, a design and cost estimate would need to be prepared, and then the project would need to be added to the priority queue for traffic calming improvements under the Traffic Engineering Improvement Program (TEIP).

FINANCIAL IMPACT

Financial Impact Statement Date: [February 3, 2020](#)

Project Name:

Traffic Study – Appleford Gate between Brace Bridge Road and Bison Drive

COMMENTS:

There is no financial impact associated with the recommendation of this report.

"Original Signed by J. Peters, CPA, CGA"

J. Peters CPA, CGA

Acting Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with: N/A

OURWINNIPEG POLICY ALIGNMENT

The recommendation of this report is aligned with the key strategic goal of a safe, efficient and equitable transportation system for people, goods and services in the Sustainable Transportation Direction Strategy that supports OurWinnipeg.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

N/A

SUBMITTED BY

Department: Public Works

Division: Transportation

Prepared by: C. Flather, P.Eng., M.Sc., Traffic Management Engineer

Date: February 3, 2020

File No.: A-08