${\bf Minutes-Standing\ Policy\ Committee\ on\ Infrastructure\ Renewal\ and\ Public\ Works-February\ 4,2020}$ 

# **REPORTS**

Item No. 17 Traffic Study – École Sage Creek School (St. Vital 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 – February 4, 2020

#### **DECISION MAKING HISTORY:**

Moved by Councillor Browaty,

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

Carried

# STANDING COMMITTEE RECOMMENDATION:

On November 4, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works granted an extension of time to its February 4, 2020 meeting for the Winnipeg Public Service to report back on the matter.

On September 12, 2019, 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 study the designated pedestrian crosswalks in front of École Sage Creek School at 315 Sage Creek Boulevard, in conjunction with the study to investigate traffic calming measures, including a potential conversion of two-way stop to three-way, or the establishment of a pedestrian corridor, at Prairie Smoke Drive and Wild Iris Walk.

#### COMMUNITY COMMITTEE RECOMMENDATION:

On July 8, 2019, the Riel Community Committee passed the following motion:

BE IT RESOLVED that the Standing Policy Committee on Infrastructure Renewal and Public Works be requested to direct the Winnipeg Public Service to study the designated pedestrian crosswalks in front of Ecole Sage Creek School at 315 Sage Creek Boulevard, in conjunction with the motion made by the Riel Community Committee on March 4, 2019, to determine if overhead flashing beacon systems are warranted at the location.

#### STANDING COMMITTEE RECOMMENDATION:

On April 2, 2019, 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 investigate traffic calming measures, including a potential conversion of two-way stop to three-way, or the establishment of a pedestrian corridor at Prairie Smoke Drive and Wild Iris Walk, and report back to the Standing Committee within 180 days.

# Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works – February 4, 2020

DECISION MAKING HISTORY (continued):

# COMMUNITY COMMITTEE RECOMMENDATION:

On March 4, 2019, the Riel Community Committee passed the following motion:

WHEREAS Sage Creek residents are concerned with the safety of students at École Sage Creek School;

THEREFORE BE IT RESOLVED that the Standing Policy Committee on Infrastructure Renewal and Public Works direct the Winnipeg Public Service to investigate traffic calming measures, including a potential conversion of two-way stop to three-way, or the establishment of a pedestrian corridor at Prairie Smoke Drive and Wild Iris Walk.

# **ADMINISTRATIVE REPORT**

Title: Crosswalk Study on Sage Creek Boulevard and Traffic Calming Measures on

Prairie Smoke Drive and Wild Iris Walk

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

# **AUTHORIZATION**

Author Department Head		CFO	CAO		
D. Patman, P. Eng.	M. Cantor, acting for	P. Olafson,	M. Ruta,		
	J. Berezowsky	Interim CFO	Interim CAO		

#### **EXECUTIVE SUMMARY**

The Public Service evaluated the need to upgrade an existing roadside signed and marked crosswalk on Sage Creek Boulevard in front of Sage Creek School. The evaluation indicated that upgrading the crosswalk to a pedestrian corridor is not warranted; however, the Public Service will design and consider, for future Capital programs, the construction of curb extensions to reduce the exposure of pedestrians using the crosswalk to vehicular traffic.

In addition, the Public Service analyzed the need for all-way stop signs and pedestrian traffic control needs at the intersection of Prairie Smoke Drive and Wild Iris Walk. This analysis indicated that, based on pedestrian and vehicular data, combined with connectivity requirements between the existing pedestrian path leading to Sage Creek School, a pedestrian signed and marked crosswalk is warranted. The estimated cost for the crosswalk signs and paint is \$1,000 and will be taken from the Traffic Services Operational Budget.

# **RECOMMENDATIONS**

1. That this report be received as information.

#### **REASON FOR THE REPORT**

At the April 2, 2019 meeting, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Riel Community Committee to investigate traffic calming measures, including a potential conversion of two-way stop to three-way, or the establishment of a pedestrian corridor, at Prairie Smoke Drive and Wild Iris Walk.

Subsequent to that, at the September 12, 2019 meeting, 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 also study the need to convert the existing signed and marked crosswalk in front of École Sage Creek School at 315 Sage Creek Boulevard to a pedestrian corridor.

# **IMPLICATIONS OF THE RECOMMENDATIONS**

There are no implications to receiving this report as information.

#### HISTORY/DISCUSSION

# SAGE CREEK BOULEVARD CROSSWALK UPGRADE

Sage Creek Boulevard is a two-lane divided collector road with a posted speed limit of 50 km/h, a bus route (Route 50), and it carries approximately 8,300 vehicles per day. There is also a 30 km/h reduced speed school zone that applies on Sage Creek Boulevard from Ranville Road to Edward Turner Drive (Monday to Friday, 07:00-17:30, September to June).

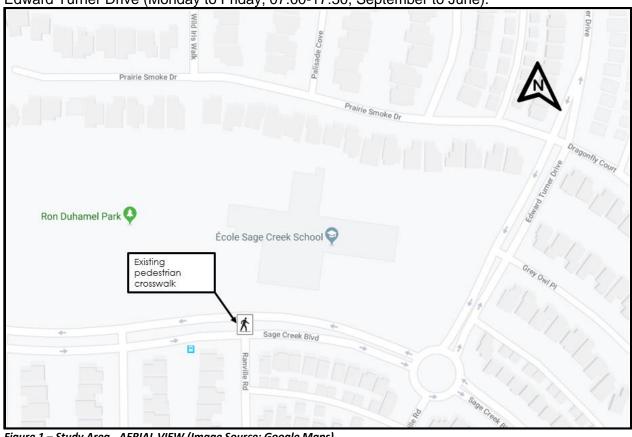


Figure 1 – Study Area - AERIAL VIEW (Image Source: Google Maps)

The City of Winnipeg has adopted the Transportation Association of Canada's Pedestrian Crossing Control Guide to assess the need for pedestrian traffic control. The assessment includes an evaluation of pedestrian and vehicular volumes, proximity to other crossing locations, and route connectivity and land use, to name a few.

The evaluation process for the installation of a pedestrian traffic control device includes 6 steps:

- 1. Initial event (request)
- 2. Preliminary assessment
- 3. Treatment selection
- 4. Assessment of potential impacts to guiding principles
- 5. Treatment installation
- 6. Monitoring and evaluation

The Public Service carried out an assessment that includes steps 3 and 4 of this process only because a device is already in place.

The Public Service reviewed the geometric design of Sage Creek Boulevard and cross-referenced this type of road design to verify the suitability of the existing roadside signed and marked crosswalk.

According to the Pedestrian Traffic Control Guidelines, a signed and marked pedestrian crosswalk is the suitable traffic control device for this intersection and level of pedestrian and vehicular traffic.

However, it was noticed that there is surplus vehicular capacity, and based on the current traffic activity, one traffic lane per direction reflects the de facto operation at the location where this crosswalk is located. This can be seen in Figure 2, below. The accumulation of ice shows the lack of use of the curb lane on this portion of Sage Creek Boulevard. This suggests that curb extensions could be considered for installation so that pedestrians using this crosswalk location only need to cross one traffic lane per direction instead of two. Curb extensions would significantly reduce the exposure of pedestrians to vehicular traffic. The Public Service will prepare a design (T-Drawing) and cost estimate that includes these curb extensions and consider their construction as part of future Capital projects.

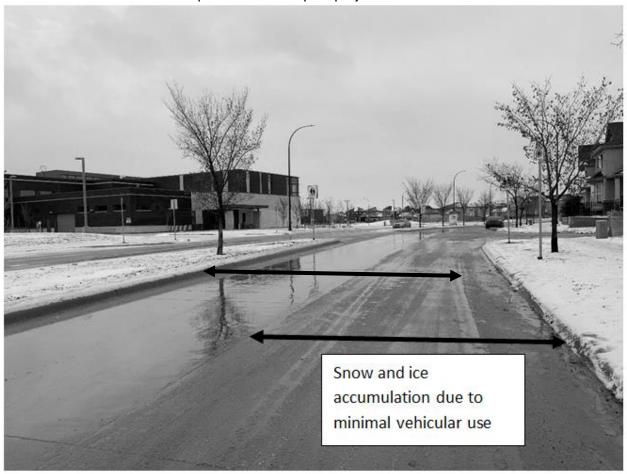


Figure 2 - Sage Creek Blvd Looking East

# TRAFFIC CALMING ASSESSMENT ON PRAIRIE SMOKE & WILD IRIS

A review of the need for traffic control devices, including all-way stop control, was carried out for the intersection of Prairie Smoke Drive and Wild Iris Walk. This review included an analysis of pedestrian and vehicular traffic, vehicular speed, and congestion at this intersection.

#### STOP SIGN CONTROL

The intersection of Prairie Smoke Drive and Wild Iris Walk is controlled by stop signs on Wild Iris Walk. All way stop control at an intersection of two residential streets (such as this intersection) is done when there are at least 350 vehicles per hour approaching the intersection, or when there are more than 15 collisions of a type that could be prevented with all-way stop control (right angle or left with opposing through collisions) in a three year period.

The most recent vehicular traffic data at this intersection indicates that the vehicular hour requirement is not met. The total vehicular activity, in a 15-hour period, is 304 vehicles. This averages approximately 20 vehicles per hour.

In terms of speeds, most vehicular traffic (85<sup>th</sup> percentile) travelled at or below 41km/h on Wild Iris Walk north of Prairie Smoke Drive with most travel at or below 36 km/h on Prairie Smoke Drive approaching Wild Iris Walk.

The level of collision (right angle or left with through) information at this intersection is significantly less than the minimum 15 collisions in a three-year period.

This analysis indicates that all-way stop control at this intersection is not warranted. In addition to this, with nearly all vehicular traffic travelling well below the statutory speed limit (50 km/h), there is no indication of speeding on either Prairie Smoke Drive or Wild Iris Walk.

# PEDESTRIAN TRAFFIC CONTROL DEVICE

As noted earlier, most vehicular traffic approaching this intersection travels below the statutory speed limit. Furthermore, the total amount of vehicular traffic is less than 1,500 vehicles per day. Following steps 1 through 4 as noted in the evaluation of the pedestrian crosswalk located on Sage Creek Boulevard, there is a 7-hour time period (8:45-15:45) where the minimum requirement for pedestrian activity was almost met.

Considering that there is a strong desire line (a path created by consistent foot traffic) connecting the pedestrian path at this intersection and Sage Creek School, it would be advisable to install a pedestrian traffic control device.

Due to the combination of vehicular traffic volume, speeds, and pedestrian volume, together with the design of the roads leading up to this intersection (residential streets) and the residential nature of the adjacent land use, the Public Service recommends installing a roadside signed and marked crosswalk at this intersection to facilitate pedestrians crossing Prairie Smoke Drive.

This recommendation is based on the current guidelines on pedestrian traffic control, which indicate that a roadside signed and marked crosswalk is the most suitable device for installation on a two-lane road with no median, when the road carries less than 1,500 vehicles per day and has a speed limit of 50 km/h or less.

7-hr period	Pedestrians	Pedestrians/Hr	Meets activity requirement?			
05:30 - 12:30	85	12	No			
05:45 - 12:45	87	12	No			
06:00 - 13:00	89	13	No			
06:15 - 13:15	89	13	No			
06:30 - 13:30	89	13	No			
06:45 - 13:45	89	13	No			
07:00 - 14:00	89	13	No			
07:15 - 14:15	90	13	No			
07:30 - 14:30	89	13	No			
07:45 - 14:45	86	12	No			
08:00 - 15:00	86	12	No			
08:15 - 15:15	87	12	No			
08:30 - 15:30	94	13	No			
08:45 - 15:45	97	14	-			
09:00 - 16:00	80	11	No			
09:15 - 16:15	77	11	No			
09:30 - 16:30	76	11	No			
09:45 - 16:45	76	11	No			
10:00 - 17:00	76	11	No			
10:15 - 17:15	77	11	No			
10:30 - 17:30	78	11	No			
10:45 - 17:45	84	12	No			
11:00 - 18:00	88	13	No			
11:15 - 18:15	89	13	No			
11:30 - 18:30	93	13	No			
11:45 - 18:45	89	13	No			
12:00 - 19:00	76	11	No			

Table 1 - Pedestrian Activity at the intersection of Prairie Smoke Drive and Wild Iris Walk

It is estimated that the cost of installing this roadside signed and marked pedestrian crosswalk is \$1,000.00 and it will be covered by the Traffic Services Branch in Public Works as part of their operating budget.

# **FINANCIAL IMPACT**

# Financial Impact Statement Date:

First Year of Program

2020

January 3, 2020

# **Project Name:**

Crosswalk Study on Sage Creek Boulevard and Traffic Calming Measures on Prairie Smoke Drive and Wild Iris Walk

	í	2020	<u>20</u>	<u>21</u>	2022	2023	2024
<u>Capital</u>							
Capital Expenditures Required							
Less: Existing Budgeted Costs							
Additional Capital Budget Required	\$	-	\$	-	\$ -	\$ -	\$ -
Funding Sources:							
Debt - Internal							
Debt - External							
Grants (Enter Description Here)							
Reserves, Equity, Surplus							
Other - Enter Description Here							
Total Funding	\$	-	\$	-	\$ -	\$ -	\$ -
Total Additional Capital Budget							
Required	\$	-	<b>:</b>				
Total Additional Debt Required	\$	-	ī				
Current Expenditures/Revenues							
Direct Costs	\$	1,000					
Less: Incremental Revenue/Recovery							
Net Cost/(Benefit)	\$	1,000	\$	-	\$ _	\$ -	\$ -
Less: Existing Budget Amounts		1,000				 	
Net Budget Adjustment Required	\$	-	\$	-	\$ -	\$ _	\$ -

**Additional Comments:** Direct costs represent estimated expenditures for installation of a marked pedestrian crosswalk at the intersection of Prairie Smoke Drive and Wild Iris Walk. This expense will be charged to the 2020 Public Works Department operating budget.

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

Acting Manager of Finance & Administration

J. Peters CPA, CGA

# **CONSULTATION**

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

#### **OURWINNIPEG POLICY ALIGNMENT**

The Sustainable Transportation Direction Strategy developed as part of OurWinnipeg forms the policy framework for the Transportation Master Plan (TMP). Sustainable Transportation identified a vision and five Key Strategic Goals which are critical to achieving a balanced and sustainable transportation system for Winnipeg. These goals form the basis for the TMP and the directions and strategies contained within it:

- 1. A transportation system that is dynamically integrated with land use;
- 2. A transportation system that supports active, accessible and healthy lifestyle options;
- 3. A safe, efficient and equitable transportation system for people, goods and services;
- 4. Transportation infrastructure that is well maintained
- 5. A transportation system that is financially sustainable

The recommendations within this report are consistent with the Key Strategic Goals.

#### WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

N/A

# **SUBMITTED BY**

Department: Public Works Division: Transportation

Prepared by: Colleen Flather, P.Eng., Traffic Management Engineer

Date: January 3, 2020