

Vision: *The City of Greater Sudbury is a growing, world-class community bringing talent, technology and a great northern lifestyle together.*



Agenda

Traffic Committee

meeting to be held

Monday, March 21st, 2011

at 4:00 pm

Committee Room C-12, Tom Davies Square

TRAFFIC COMMITTEE AGENDA

For the 1st Traffic Committee Meeting
to be held on **Monday, March 21, 2011**
Committee Room C-12, Tom Davies Square at 4:00 pm

PLEASE ENSURE CELL PHONES AND PAGERS ARE TURNED OFF

DECLARATIONS OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

APPOINTMENT OF CHAIR AND VICE-CHAIR

COMMUNITY DELEGATIONS

1. Elm Street Parking

(ELECTRONIC PRESENTATION) (FOR INFORMATION ONLY)

- Susan Thompson, Managing Director, Downtown Village Development Corporation

(Downtown Village Development Corporation will be making a presentation regarding the parking situation on Elm Street which has become critical for several property owners.)

MANAGERS' REPORTS

2. Report dated March 10, 2011 from the General Manager of Infrastructure Services regarding Maximum Posted Speed Limit - Spanish River Road, Whitefish.

4 - 7

(RECOMMENDATION PREPARED)

(While reviewing warning sign requirements in the Whitefish area, City staff discovered that the posted speed limit on Spanish River Road is 60 km/h while the Traffic and Parking By-Law 2010-1 states the speed limit is 80 km/h. This report recommends a maximum posted speed limit of 60 km/h for Spanish River Road, Whitefish and that the Traffic and Parking By-Law be updated accordingly.)

3. Report dated March 10, 2011 from the General Manager of Infrastructure Services regarding All Way Stop Control - 1) Bouchard Street at Marcel Street, Sudbury and 2) Balsam Street at Garrow Road and Power Street, Copper Cliff. **8 - 13**

(RECOMMENDATION PREPARED)

(Peak hour traffic counts were conducted at the intersections of Bouchard Street at Marcel Street, Sudbury and Balsam Street at Garrow Road and Power Street, Copper Cliff to determine if all-way stops would be warranted. This report represents staff's findings and recommendations for traffic control at these intersections.)

4. Report dated March 10, 2011 from the General Manager of Infrastructure Services regarding Speed Limit - Paris Street, John Street to York Street, Sudbury. **14 - 16**

(RECOMMENDATION PREPARED)

(Currently, the speed limit on Paris Street from John Street to York Street, Sudbury is 40 km/h. As the St. Joseph's Health Centre is now closed requests have been made to change the speed limit to 50 km/h. The report recommends the maximum speed limit remain at 40 km/h.)

Adjournment (Resolution Prepared)

ANGIE HACHÉ, CITY CLERK

LIZ COLLIN, PLANNING COMMITTEE SECRETARY

Request for Decision

Maximum Posted Speed Limit - Spanish River Road, Whitefish

Presented To:	Traffic Committee
Presented:	Monday, Mar 21, 2011
Report Date	Thursday, Mar 10, 2011
Type:	Managers' Reports

Recommendation

That the speed limit on Spanish River Road from Fairbank Lake Road to the City limits be 60 km/h, and;

That a by-law be passed by City Council to amend Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury to implement the recommended change all in accordance with the report from the General Manager of Infrastructure Services dated March 10, 2011.

Background

While reviewing warning sign requirements in the Whitefish area, City staff identified that the posted speed limit on Spanish River Road is 60 km/h while the Traffic and Parking By-Law 2010-1 indicates that the speed limit is 80 km/h. Due to the discrepancy, staff has undertaken a review to determine an appropriate maximum speed limit.

Spanish River Road is located in Whitefish and provides a connection between Fairbanks Lake Road (M.R. 4) and Nairn Centre (**see Exhibit "A"**). Spanish River Road is a 6.1 m wide surface treated road with gravel shoulders. Under the Official Plan, it is classified as a local roadway.

At the October 13, 2010 meeting, City Council adopted the use of the Canadian Guidelines for Establishing Posted Speed Limits, published by the Transportation Association of Canada, for evaluating posted speeds on arterial and major collector roadways. Although Spanish River is classified as a local roadway, staff applied the physical characteristics of the road to the new Canadian Guidelines and the roadway obtained a total risk score of 20 (**see Exhibit "B"**). Based on the functional classification of the road being "two lane rural undivided local roadway", a total risk score of 20 results in a recommended speed limit of 60 km/h.

Staff also completed a speed study on Spanish River Road on February 24, 2011. The study was conducted approximately 100 metres east of Worthington Road. The speed of nearly 350 vehicles was recorded, and showed the average speed to be 53.0 km/h and the 85th percentile speed to be 64.4 km/h. The 85th percentile speed is the speed at or below which 85 percent of drivers are travelling and is generally accepted as a good indicator of an appropriate speed limit. Considering the function of the

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Division Review

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roadway and the prevailing operating speeds, staff recommends the maximum posted speed limit to be 60 km/h.

Additionally, there are several horizontal curves along Spanish River Road that have a measured “comfortable” speed of less than 60 km/h. Therefore, staff will be enhancing the existing curve warning and advisory speed signs along Spanish River Road to further enhance safety.



Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor: Spanish River Road

Segment Evaluated: Fairbank Lake Road

to City Limits

Geographic Region: Walden

Road Agency: City of Greater Sudbury

Road Classification: Local

Length of Corridor: 10,000 m

Urban / Rural: Rural

Design Speed: (Required for Freeway, Expressway, Highway) km/h

Divided / Undivided: Undivided

Current Posted Speed: 60 km/h
(For information only)

Major / Minor: Minor

Prevailing Speed: 64 km/h
(85th Percentile - for information only)

Through Lanes 1 lane

Policy:
(Maximum Posted Speed)

Per Direction:

		RISK	Score
A1	GEOMETRY (Horizontal)	Lower	2
A2	GEOMETRY (Vertical)	Lower	2
A3	AVERAGE LANE WIDTH	Medium	2
B	ROADSIDE HAZARDS	Lower	3
C1	PEDESTRIAN EXPOSURE	Lower	1
C2	CYCLIST EXPOSURE	Lower	1
D	PAVEMENT SURFACE	Medium	6
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	<i>Number of Occurrences</i>	1
	STOP controlled intersection	0	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	2	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	<i>Number of Occurrences</i>	1
	Left turn movements permitted	21	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	<i>Number of Occurrences</i>	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	Lower	1

Total Risk Score:

20

Recommended Posted
Speed Limit (km/h):

As determined by road characteristics

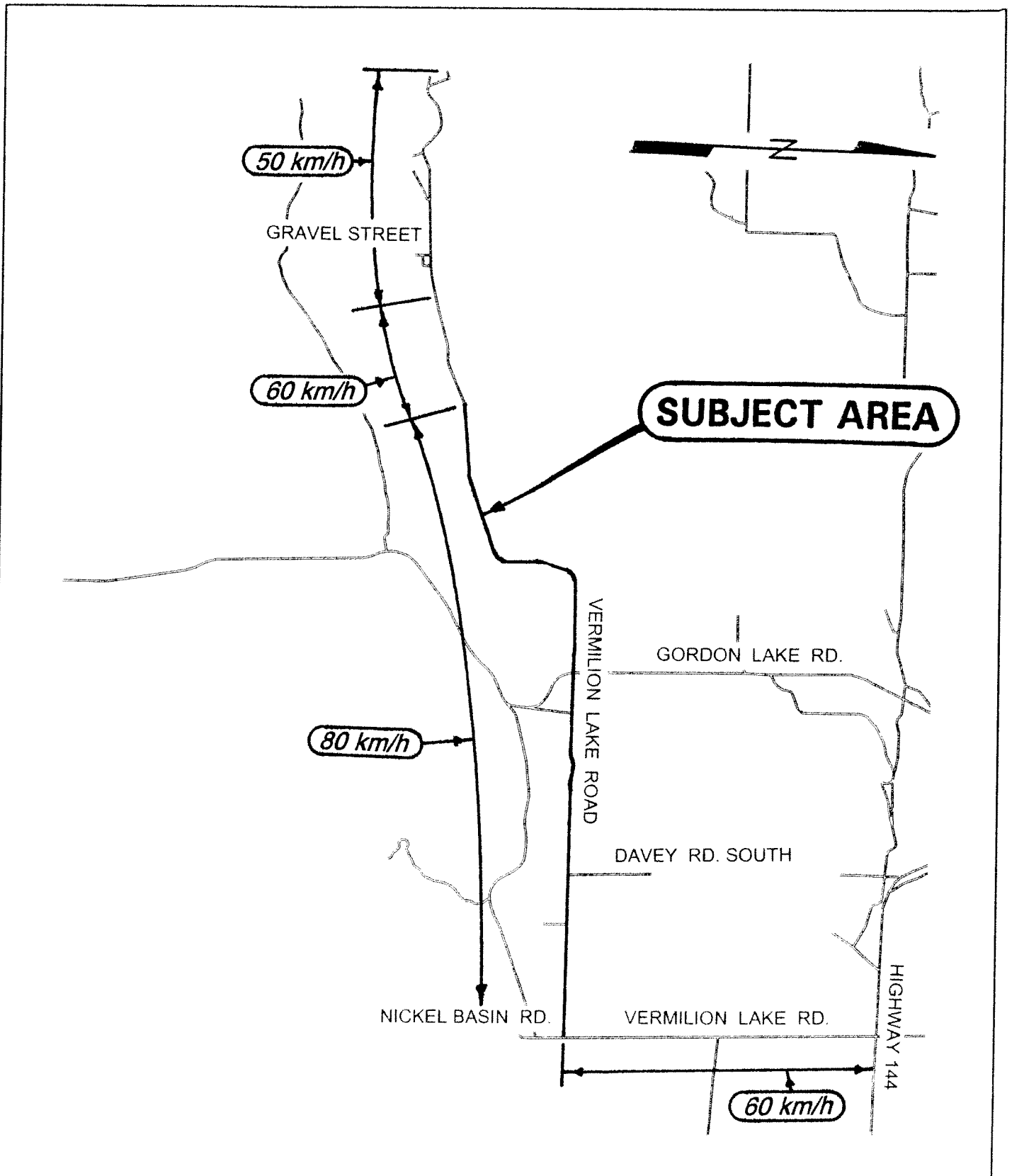
60


As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance

Comments:

EXHIBIT: A



	VERMILION LAKE ROAD - NICKEL BASIN RD. to 1,550 METRES EAST OF GRAVEL STREET	
	MAXIMUM SPEED LIMITS	
	NTS	2010-09-15

Request for Decision

All Way Stop Control - 1) Bouchard Street at Marcel Street, Sudbury and 2) Balsam Street at Garrow Road and Power Street, Copper Cliff

Presented To:	Traffic Committee
Presented:	Monday, Mar 21, 2011
Report Date	Thursday, Mar 10, 2011
Type:	Managers' Reports

Recommendation

That the intersection of Balsam Street at Garrow Road at Power Street be controlled by an all-way-stop, and;

That a by-law be passed by City Council to amend Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury to implement the recommended change all in accordance with the report from the General Manager of Infrastructure Services dated March 10, 2011.

Background

1) Bouchard Street at Marcel Street

On August 4th, 2010, Councillor Cimino requested that a turning movement count be conducted to determine if an all-way stop would be warranted at the intersection of Bouchard Street and Marcel Street.

Bouchard Street at Marcel Street is a cross intersection located west of Regent Street (**see Exhibit "A"**). There is also a playground located in the southeast corner of the intersection. Currently this intersection is controlled with "stop" signs facing northbound and southbound traffic on Marcel Street. This portion of Bouchard Street was also part of the Traffic Calming Pilot Project, and had a median island installed on the east leg of this intersection.

Applying the data from the turning movement count that was conducted on August 25th, 2010 to the City's new Minimum Volume Warrant indicates that the vehicle and pedestrian volume from the side street meets approximately 75 percent of the volume requirements. The traffic volume split is 80 percent on Bouchard Street and 20 percent on Marcel Street. This is outside the ratio of 70/30 needed to warrant an "all-way" stop (**see Exhibit "B"**).

Comparing the 2010 turning movement count to a previous count conduct in 2007, indicates that volumes at this intersection may be artificially high due to the ongoing construction on Regent Street. Southbound traffic

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from Marcel Street has increased by 27 percent (222 in 2007 vs. 282 in 2010) while northbound traffic from Marcel Street has more than doubled (363 in 2007 vs. 738 in 2010).

A review of the City's collision information from 2008 to 2010 revealed that there were no collisions that may be susceptible to relief through an all-way stop during this three (3) year period. For a Major Collector roadway, the Collision Warrant requires a minimum of four (4) collisions per year over a three (3) year period.

Councillor Cimino also expressed concerns about the safety of pedestrians while crossing Bouchard Street at this intersection. The existing median island on the east leg of this intersection was recommended by the IBI Group as part of the Traffic Calming Pilot Project in order to "provide a pedestrian refuge that supports a two-stage crossing for times when traffic volumes make crossing difficult". During the seven (7) hour count, we recorded a total of five (5) pedestrians crossing Bouchard Street at this intersection (four (4) crossing the east leg and one (1) crossing the west leg).

Based on the traffic volumes, pedestrian volume and collision history, staff does not recommend installing an all-way stop at the intersection of Bouchard Street and Marcel Street. Staff will arrange to recount this intersection once construction is completed on Regent Street to ensure that traffic volumes on Marcel Street do not remain high.

2) Balsam Street at Garrow Road at Power Street

Councillor Barbeau requested that a turning movement count be conducted to determine if an all-way stop is warranted at the intersection of Balsam Street at Garrow Road/Power Street.

Balsam Street at Garrow Road/Power Street is a cross intersection located in Copper Cliff (**see Exhibit "C"**). The Copper Cliff Library is located on the northwest corner of the intersection and the McClelland Arena and R.G. Dow Pool are located northeast of the intersection. Currently this intersection is controlled with "stop" signs facing northeast bound traffic on Power Street and southwest bound traffic on Garrow Road.

Applying the data from the turning movement count that was conducted on May 25th, 2010 to the City's new Minimum Volume Warrant indicates that the traffic volume at this intersection meets the minimum vehicle volume requirements (**see Exhibit "D"**). A review of the City's collision information from 2008 to 2010 revealed that there were three (3) collisions that may be susceptible to relief through an all-way stop during this three (3) year period. For a Minor Collector roadway, the Collision Warrant requires a minimum of three (3) collisions per year over a three (3) year period.

Since the traffic volume meets the minimum vehicle volume warrant, staff recommends installing an all-way stop at the intersection of Balsam Street at Garrow Road/Power Street. Also, staff recommends that physical changes be made to the intersection to better define the approaches and to improve safety for pedestrians. These changes will be funded from the 2011 Capital Roads budget.

EXHIBIT: B



CITY OF GREATER SUDBURY ALL-WAY STOP WARRANTS

Location:	<u>Bouchard Street at Marcel Street</u>	Date:	<u>March 3, 2011</u>
Date of TM Count:	<u>August 25, 2010</u>	Analyst:	<u>JR</u>
Type of Intersection:	<u>Cross</u>		
Roadway Type	<u>Arterial/Major Collector</u>		
AADT of Main Road:	<u>10500</u>		

All-Way Stop Warrant Summary

Warrant #1	Minimum Vehicle Volume	<u>63.3</u>	%
Warrant #2	Collision History	<u>0.0</u>	%
Warrant #3	Traffic Control Signals	<u>No</u>	Y/N

All-Way Stop Warranted? **No** Y/N

Warrant #1 - Minimum Vehicle Volume

Roadway Type	Arterial/Major Collector	Minor Collector	Local	Vehicles per hour	Percent Compliance
AADT	> 5000	1000 - 5000	< 1000		
Count Period	7 hours	4 peak hours	4 peak hours		
Total vehicle volume from all approaches is ≥	500/hr	350/hr	250/hr	780	100.0%
Veh + Pedestrian volume from side street is ≥	200/hr	140/hr	N/A	146	73.2%
Traffic Split	70/30	70/30	70/30	81 / 19	63.3%

Warrant #2 - Collision History

Roadway Type	Arterial/Major Collector	Minor Collector	Local	Number of Collisions per year	Percent Compliance
Collisions per Year over 3 year period	4*	3*	2*	0	0.0%

Warrant #3 Traffic Control Signals are warranted and urgently needed, signs to be used as interim measures. **No** Y/N

* Only those collisions susceptible to relief through multi-way stop control must be consider (i.e. right angle and turning types).

- If the intersection meets warrant # 1, then the all-way stop is recommended regardless of the remaining warrants.
- If the intersection does not meet warrant #1 and does not meet warrant #2, then the all-way stop is not recommended.
- If the intersection does not meet warrant #1 and does meet warrant #2, then the all-way stop is recommended.

EXHIBIT: D



CITY OF GREATER SUDBURY ALL-WAY STOP WARRANTS

Location:	Balsam Street at Power Street	Date:	March 3, 2011
Date of TM Count:	May 25, 2010	Analyst:	JR
Type of Intersection:	Cross		
Roadway Type	Minor Collector		
AADT of Main Road:	3998		

All-Way Stop Warrant Summary

Warrant #1	Minimum Vehicle Volume	100.0	%
Warrant #2	Collision History	33.3	%
Warrant #3	Traffic Control Signals	No	Y/N

All-Way Stop Warranted? **Yes** Y/N

Warrant #1 - Minimum Vehicle Volume

Roadway Type	Arterial/Major Collector	Minor Collector	Local	Vehicles per hour	Percent Compliance
AADT	> 5000	1000 - 5000	< 1000		
Count Period	7 hours	4 peak hours	4 peak hours		
Total vehicle volume from all approaches is ≥	500/hr	350/hr	250/hr	461	100.0%
Veh + Pedestrian volume from side street is ≥	200/hr	140/hr	N/A	185	100.0%
Traffic Split	70/30	70/30	70/30	62 / 38	100.0%

Warrant #2 - Collision History

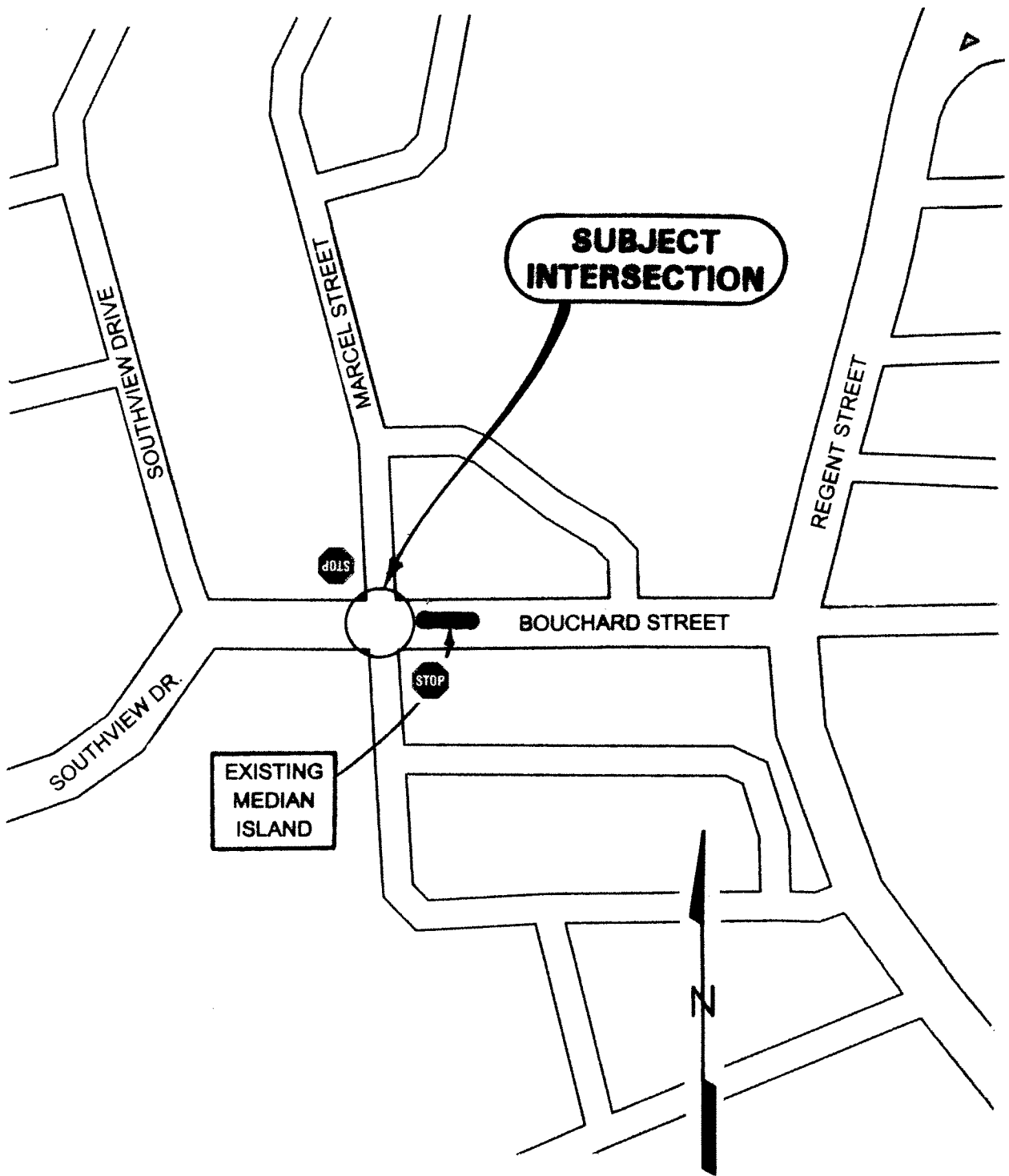
Roadway Type	Arterial/Major Collector	Minor Collector	Local	Number of Collisions per year	Percent Compliance
Collisions per Year over 3 year period	4*	3*	2*	1	33.3%

Warrant #3 Traffic Control Signals are warranted and urgently needed, signs to be used as interim measures. **No** Y/N

* Only those collisions susceptible to relief through multi-way stop control must be considered (i.e. right angle and turning types).

- If the intersection meets warrant #1, then the all-way stop is recommended regardless of the remaining warrants.
- If the intersection does not meet warrant #1 and does not meet warrant #2, then the all-way stop is not recommended.
- If the intersection does not meet warrant #1 and does meet warrant #2, then the all-way stop is recommended.

EXHIBIT: A




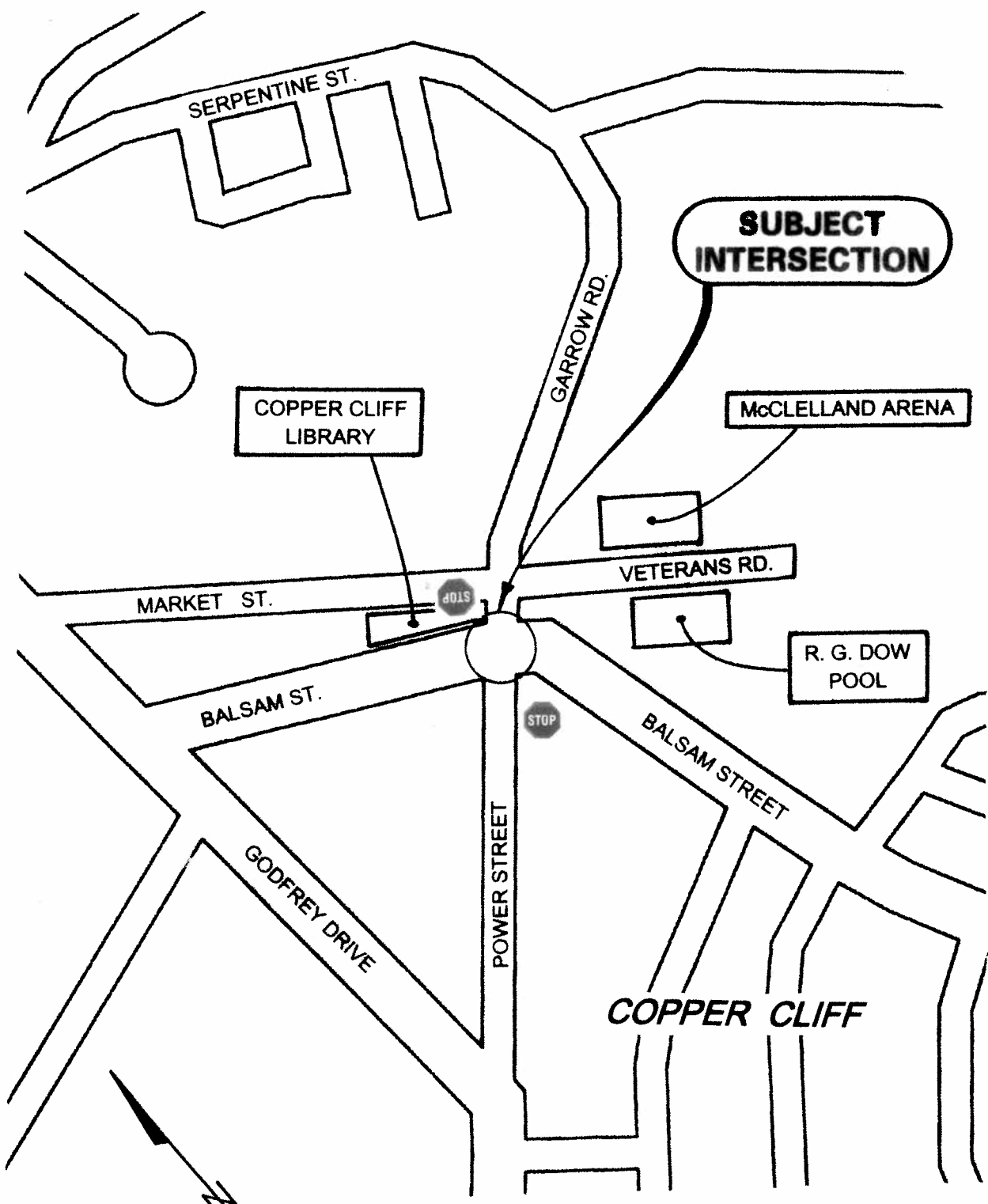

	BOUCHARD STREET at MARCEL STREET	
	ALL-WAY STOP CONTROL	
	NOT TO SCALE	Page 12 of 16 2011-02-10

EXHIBIT: C



 Sudbury	BALSAM STREET at GARROW ROAD at POWER STREET	
	ALL-WAY STOP CONTROL	
	NOT TO SCALE	Page 13 of 16 2011-02-10

Request for Decision

Speed Limit - Paris Street, John Street to York Street, Sudbury

Presented To:	Traffic Committee
Presented:	Monday, Mar 21, 2011
Report Date	Thursday, Mar 10, 2011
Type:	Managers' Reports

Recommendation

That the maximum speed limit on Paris Street from John Street to York Street remain at 40 km/h all in accordance with the report from the General Manager of Infrastructure Services dated March 10, 2011.

Background

At the Traffic Committee meeting held on August 23, 2010, staff was asked to "prepare a report regarding the speed limit on Paris Street from John Street to York Street as the St. Joseph Health Centre is now closed". The following information is provided in response to the request.

The section of Paris Street under review is located south of the Bridge of Nations and extends to York Street at Bell Park (**see Exhibit "A"**). Paris Street, from John Street to Facer Street, is constructed to a four (4) lane urban standard. South of Facer Street, the road widens to provide a continuous left turn lane for the former St. Joseph's Health Centre and Boland Avenue. This section of Paris Street carries an average annual daily traffic volume (AADT) of 33,000 and has a posted speed limit of 40 km/h. North of John Street the speed limit increases to 50 km/h and the speed limit south of York Street is 60 km/h. The section of Paris Street under review is approximately 875 metres in length, and is characterised by a number of horizontal and verticle curves. The sharp horizontal curve located at Facer Street has a measured comfortable operating speed of 40 km/h in the northbound direction and 50 km/h in the southbound direction. The history of the existing 40 km/h speed zone is not known, but it likely has more to do with the sharp curve at Facer Street and lack of a centre left turn lane than the prepresence of the hospital itself.

A review of the City's collision information for 2008, 2009 and the first six (6) months of 2010 shows that this section of Paris Street experiences a high frequency of collisions. In 2008 there were a total of 40 collisions between John Street and York Street. In 2009, there were 28 collisions, and 17 collisions have occurred in the first six (6) months of 2010. All of the collisions occurred from Boland Avenue to John Street, and the majority of collisions (73 percent) were rear end type collisions. These types of collisions are caused by

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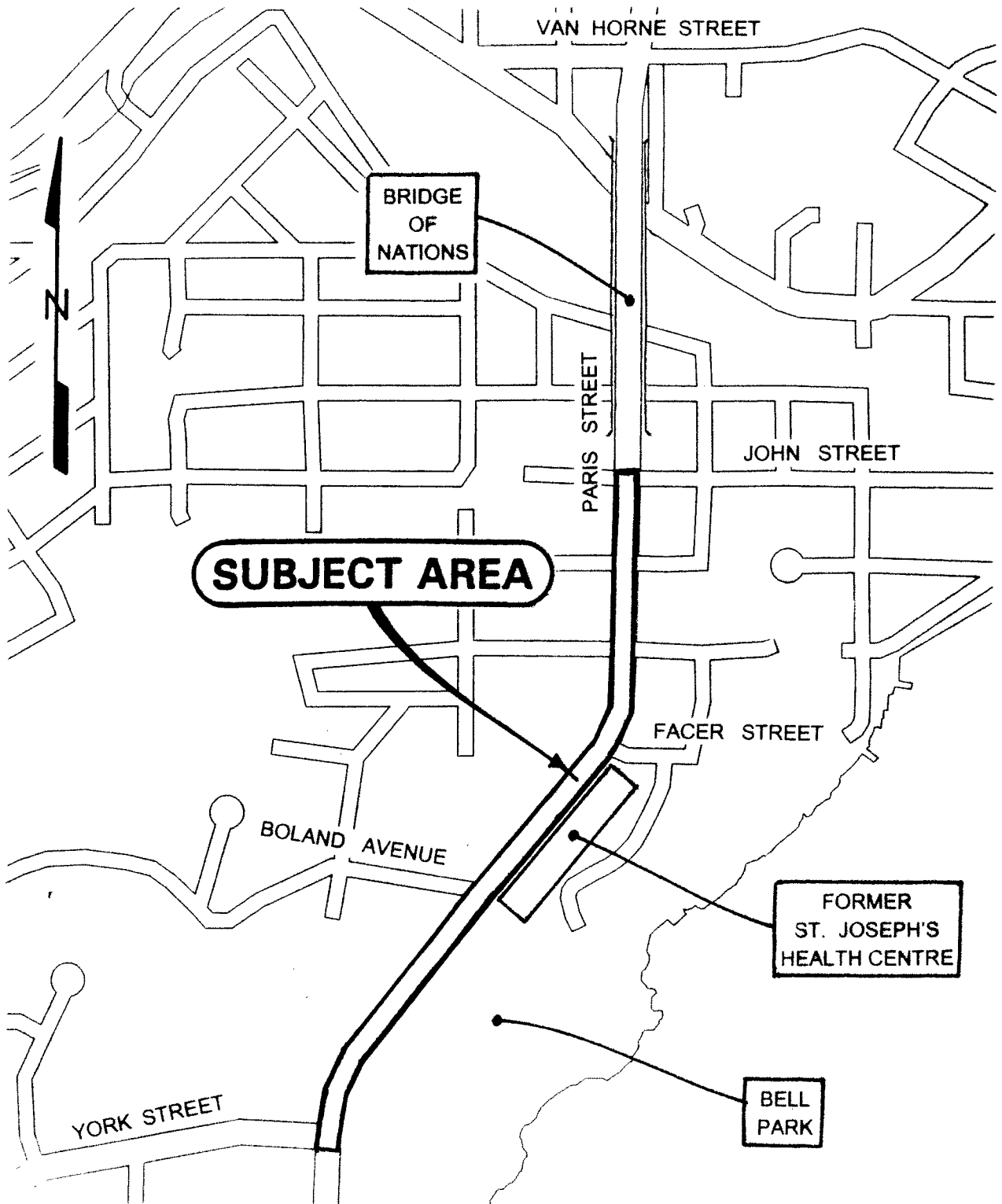
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aggressive driving behavior such as “speeding” and “following too close”. The lack of a centre left turn lane south of John Street and the sharp curve at Facer Street contribute to the collision problems.

Generally, lowering the legal speed limit is not considered an effective tool for reducing the number of collisions along a roadway. However, raising the speed limit on a road with a high frequency of collisions and sharp curves does not appear to be appropriate. Safety research studies show that collision severity increases as operating speeds increase. Therefore, based on the above information, it is recommended that the existing 40 km/h speed limit be maintained until geometric improvements to the roadway can be made along the corridor. The proposed redevelopment of the former hospital may provide some opportunities for improvements to Paris Street.

EXHIBIT: A



 Sudbury	SPEED LIMIT	
	PARIS STREET	
	JOHN STREET TO YORK STREET	
NOT TO SCALE	Page 16 of 16	2011-03-03