

Request for Decision

Elm Street - On Street Parking

Presented To:	Operations Committee
Presented:	Monday, Oct 05, 2015
Report Date	Tuesday, Sep 15, 2015
Type:	Managers' Reports

Recommendation

THAT the City of Greater Sudbury not permit parking on the south side of Elm Street between Elgin Street and Lisgar Street;

AND THAT a by-law be prepared to amend Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury to implement the recommended changes all in accordance with the report from the General Manager of Infrastructure Services dated September 15, 2015.

Finance Implications

If the on street parking on Elm Street as identified in the report is eliminated, the Roads 2016 Operating Budget will be reduced by the \$25,000 winter maintenance cost and the corresponding \$ 25,000 budgeted revenue from parking meters will be eliminated. As a result, there is no tax levy impact.

Background

On July 8, 2013, the City's Operations Committee approved the following decision which was later approved by City Council on August 13, 2013:

THAT the City of Greater Sudbury approve the installation of parking meters on the south side of Elm Street between Lisgar Street and Elgin Street and that a rate of \$1.30 per hour be charged with a maximum parking time of two (2) hours;

AND THAT staff prepare a communications plan to advise the traveling public of the two (2) year trial period;

AND THAT the Roads Operating Budget be increased by \$25,000 in 2014 and 2015 to provide enhanced snow removal services to the parking area during the trial period;

AND THAT the trial period starts the date the parking meters are in operation;

AND THAT the overnight parking ban from December 1st to March 31st apply to Elm Street;

AND THAT staff monitor the parking area for traffic safety during the trial period and should there be

Signed By

Report Prepared By

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Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed Sep 15, 15

Division Review

David Shelsted
Director of Roads & Transportation
Services
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Recommended by the Department

Tony Cecutti
General Manager of Infrastructure
Services
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Recommended by the C.A.O.

Bob Johnston
Interim Chief Administrative Officer
Digitally Signed Sep 23, 15

a concern for safety the General Manager of Infrastructure Services has the authority to end the trial period.

Subsequent to Council's approval, parking meters were installed on the south side of Elm Street between Elgin Street and Lisgar Street, in mid September 2013. A total of 18 parking spaces were created in the two (2) blocks (see Exhibit 'A').

During the two (2) year trial, staff monitored safety and tracked the public comments; parking revenue and utilization; and enforcement and ticketing to help evaluate the merits of the program.

Collisions and Safety

One of the main concerns expressed by the public and staff over the pilot project was a decrease in safety that may result. Some of the concerns related to parking on a multi-lane arterial road include:

- Need for frequent lane changes
- Difficult manoeuvres to access and exit the parking lane
- Drivers and passengers exiting vehicles adjacent to a busy through lane of traffic
- The congestion created results in vehicles stopping on the railway tracks more often

A review of the City's collision information from October 2013 to July 2015 showed there have been three (3) collisions in the immediate area of the trial that may be related to the on-street parking. In the first collision, an eastbound vehicle in the curb lane was cut off trying to change lanes and rear ended a parked vehicle. In the second collision, an eastbound vehicle attempted to change lanes east of Elgin Street and struck an eastbound motorcycle in the left lane. In the third collision, an eastbound vehicle was rear ended while slowing down just east of Durham Street.

Railway Crossing

As previously reported, Roads and Transportation Services received a letter on August 3, 2012 from Transport Canada regarding the Elm Street railway crossing (see Exhibit 'C2'). In the letter, Jeffrey Young of Transport Canada outlines two (2) separate inspections where railway inspectors observed vehicle traffic queued from the Elm at Elgin Streets intersection overhanging the railway tracks. This occurred twice during each inspection. Staff conducted an analysis of the queue lengths from this intersection using SimTraffic software. The results of the analysis indicate that from 3:00 p.m. to 4:00 p.m., the queue of vehicles from the intersection will overhang the railway crossing on two (2) occasions during the hour.

Additionally, Transport Canada expressed safety concerns with the clearing of traffic queues after the passage of a train, stating "It should be pointed out that I can see the issue to traffic queuing over the tracks in both the eastward and westward directions becoming more intensified during the passage of a train when the traffic backs up while waiting for the train to clear the crossing. As the Elm Street crossing is a three (3) track crossing, the risk of a second train approaching the crossing as the first train clears presents a greater risk of a possible train/vehicle collision to traffic being stranded on the tracks." Since the time required to disperse this eastbound traffic will be increased with the reduced capacity of Elm Street, there will be an even greater risk of a possible collision between a vehicle and a train should parking be permitted on Elm Street.

Transport Canada also requested in their letter that the missing "Do Not Stop on Tracks" signs and painted stop bars be replaced at the railway crossing. These items have been replaced since receiving this letter.

City staff has also improved the signal timing at the intersection of Elm Street and Lorne/College Streets which reduces the westbound queue length and the occurrences of it spilling back to the railway crossing.

Public Comments

As part of the On-Street Parking Pilot project, calls and emails into the City's 311 system were recorded and tracked. From June 2013 to August 2015, a total of 26 calls and emails were received by the City related to the pilot project. All of the comments were negative towards the project. The majority of complaints were related to increased congestion and delays; reduced safety; and vehicles parked illegally during rush hour.

Tracking of the public comments has shown a significant reduction since the start of the pilot project with only one (1) complaint received in 2015 so far. A total of 11 complaints were received during the first winter of the pilot project when road conditions were at their worst.

Parking Revenue and Utilization

Since the start of the pilot project, the revenue generated by the parking meters on Elm Street has been tracked by the City's Parking Services Section. The following table shows that the total revenue collected from October 2013 to the end of July 2015 is \$37,209.85, or approximately \$20,000 per year.

Elm Street Parking Collection Revenue

Year	Number of Months	Total Revenue	Average Revenue per Month	Percent Utilized
2013	3	\$3,477.44	\$1,159.15	35%
2014	12	\$19,529.36	\$1,627.45	49%
2015	7	\$14,203.05	\$2,029.01	62%
Total		\$37,209.85		

The Table also shows that the average monthly revenue generated and utilization rates are increasing since the pilot project began. The percent utilized is a measure of occupancy for the parking spaces based on the ratio of the actual revenue collected against the maximum revenue that can be generated by the meters. It should be noted that in 2010, IBI Group conducted surveys to determine the utilization of all on-street parking spaces for the City's Strategic Parking Plan. As indicated in that report, daily occupancy rates for other streets in the area ranged from 75 to 90 percent. This is significantly higher than a high of 62 percent for Elm Street in 2015.

Enforcement and Ticketing

Information provided by the City's Compliance and Enforcement Department indicates that a total of 1,204 tickets were issued for all of Elm Street during the previous year for all parking offences.

Unfortunately, it was not possible to separate the tickets that were issued in the pilot project area from the other parking meter zones located on Elm Street, west of Lorne Street. However, a total of 456 tickets were issued on Elm Street for "parking at expired meters" for a total of \$6,840. Another 341 tickets were issued for "parking in a prohibited area during stated times" for a total of \$6,700.

As previously indicated, one of the most common complaints received regarding the parking trial was people parking during the weekday rush hours between 7:30 a.m. and 9:00 a.m. and 3:30 p.m. to 6:00 p.m.

Speed and Delay Studies

New speed and delay studies were not conducted as part of the pilot project. However, as part of the previous on-street parking trial, extensive travel time surveys were completed before and after the trial. The following is a summary of the results.

From the vehicle runs, the average speed is calculated by dividing of the total distance travelled by the time required to travel the total distance. A summary of the results can be found in the following table:

Direction of Travel	Study Period	Average Speed (km/h)	Average Total Travel Time (s)
Eastbound	Before Pilot Project	18.7	60
	During Pilot Project	10.6	96
	Difference	-8.1 km/h	+ 36 seconds
Westbound	Before Pilot Project	14.1	78
	During Pilot Project	10.0	102
	Difference	-4.1 km/h	+ 24 seconds

The results from the speed runs were as expected. For eastbound traffic, the average operating speed was decreased by 43 percent from 18.7 km/h to 10.6 km/h. Travel time increased by 36 seconds (60 percent) after the introduction of parking. These results can be attributed to the decreased capacity of Elm Street and subsequent increase in traffic congestion. The increased delay to drivers can be represented as an annual dollar value. The following formula represents the annual dollar value for eastbound weekday traffic between the hours of 9:00 a.m. and 4:00 p.m.:

$$\text{Total Annual Cost} = \text{OCC} * \text{W} * \text{D} * \text{SV} * (\text{TDD}-\text{TTB}) / 3600 * \text{AVERAGE CANADIAN WAGE}$$

OCC = average person occupancy rate = 1.2

W = weeks in a year = 52

D = days in a week = 5

SV = study volume (eastbound volume from 9 AM to 4 PM) = 3726

TTB = total travel time before pilot project

TTD = total travel time during pilot project

Average Canadian Wage (October 2010 – from Statistics Canada) = \$23.92

$$\text{Total Annual cost} = 1.2 * 52 * 5 * 3726 * (96-60) / 3600 * \$23.92$$

$$\text{Total Annual Cost} = \$278,072 \text{ per year}$$

Based on the above calculation, the total annual cost of increasing the travel time of eastbound vehicles by 36 seconds is just over \$278,000.

From the above table, it is noted that westbound traffic also had a 4.1 km/h reduction (29 percent decrease) in the average speed and a 24 second increase (31 percent increase) in travel time. These results are likely due to the increase in traffic volume resulting from drivers avoiding the construction that was taking place on Brady Street.

Ste. Anne Road Extension

The major concerns about parking in this area of Elm Street are related to the volume of traffic that uses this corridor each day. The Annual Average Daily Traffic Volume (AADT) on this section of Elm Street is 16,000, and hourly volumes exceed the theoretical capacity of a single lane for most of the afternoon.

The 2005 Transportation Study indicated that the westerly extension of Ste. Anne Road to College Street will provide relief to Elm Street between Lorne Street and Frood Road. Moderate traffic reductions will also

occur on Elm Street from Frood Road to Paris Street. The 2010 Downtown Master Plan recommends construction of the Ste. Anne Extension within 6 to 10 years. Construction of the Ste. Anne Extension will help support one of the goals of the study to re-build and reinvent Elm Street, complete with traffic calming features and on-street parking.

The 2015 Transportation Study report recommends that the Ste. Anne Extension be constructed within the next 11 to 15 years. However, the plan also recommends that Larch Street be extended to the west across the railway tracks to connect with Lorne Street within the next 6 to 10 years. This new connection also results in significant traffic volume reductions on Elm Street. Based on the feasibility of constructing this extension across CP Rail property, the timing of these two projects can vary.

It is recommended that parking on Elm Street be reviewed in conjunction with construction of the Ste. Anne Road Extension and/or the Larch Street Extension.

Recommendations

Due to existing recording methods, it is not possible to accurately track the revenue generated by the enforcement of parking regulations. However, an estimate of ticket revenue combined with revenue generated by the parking meters would be approximately equal to the \$25,000 increased cost of winter maintenance.

However, from a transportation perspective, parking has an adverse impact on safety and results in a very high cost associated with increased congestion. Therefore, it is recommended that the parking trial on Elm Street not continue and parking be prohibited on the south side between Elgin Street and Lisgar Street.

If the trial is ended and parking is prohibited on Elm Street, then it is recommended that the Roads Operating Budget be reduced by \$25,000 per year in 2016 and beyond.

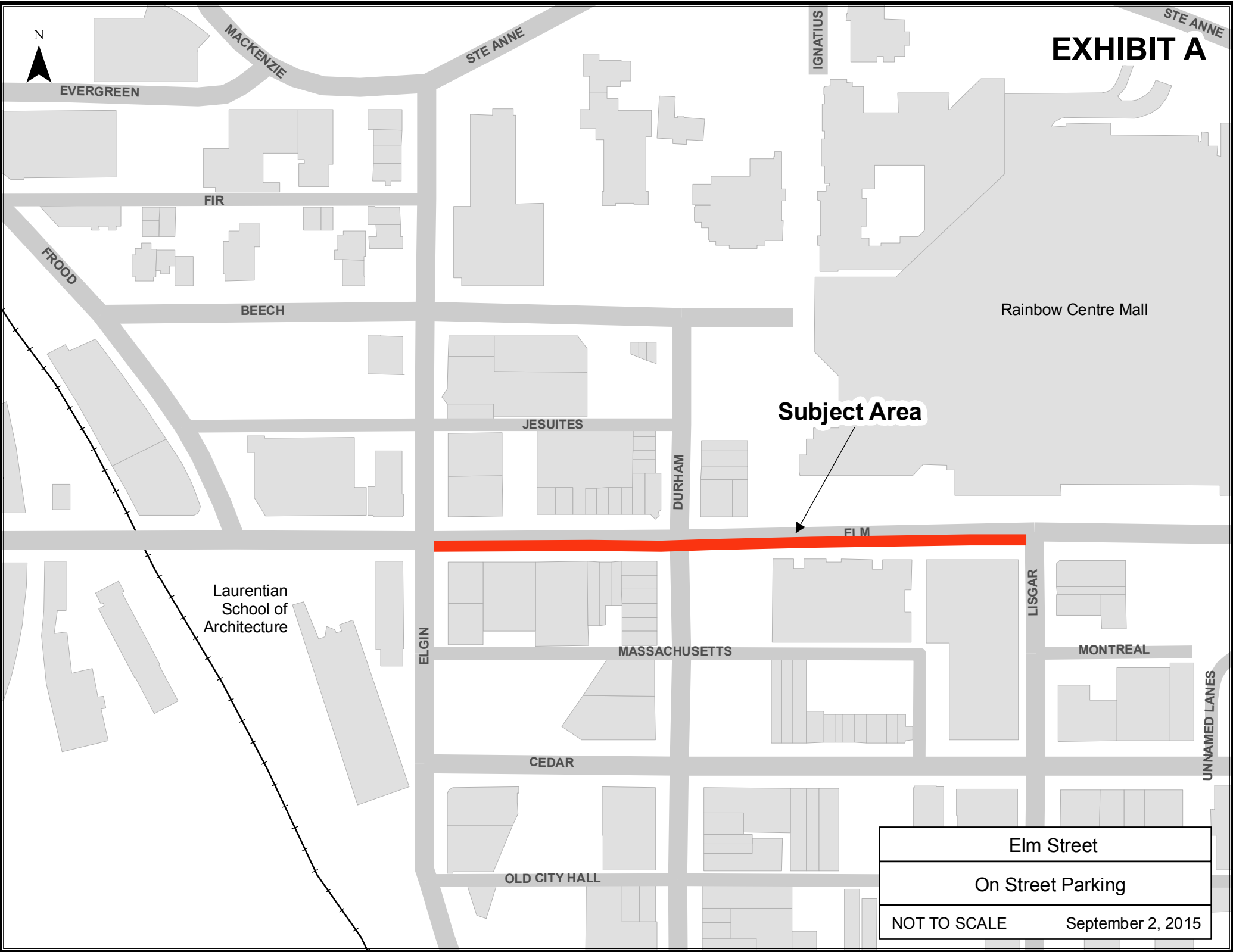


EXHIBIT A

Subject Area

Rainbow Centre Mall

Laurentian
School of
Architecture

Elm Street	
On Street Parking	
NOT TO SCALE	September 2, 2015

EXHIBIT: C2

From: "Young, Jeffrey" <jeffrey.young@tc.gc.ca>
To: 'David Shelsted' <David.Shelsted@city.greatersudbury.on.ca>, 'Dave Kivi' <dave.kivi@greatersudbury.ca>, 'Tony DeSilva' <Tony.DeSilva@greatersudbury.ca>
Date: 8/3/2012 12:48 PM
Subject: Elm Street Railway Crossing - Mile 79.43 Cartier Subdivision - CP Rail - Traffic Queuing Issues
CC: "Lee, Scott" <Scott.Lee@tc.gc.ca>, "Williams, Duwayne" <Duwayne.Williams@tc.gc.ca>, Allan Mielke <Allan_Mielke@cpr.ca>, 'NormandThibert' <Normand_Thibert@cpr.ca>

4900 Yonge Street
North York, Ontario
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August 3, 2012

Mr. David Shelsted, P. Eng
Director of Roads and Transportation Services
City of Greater Sudbury
1800 Frobisher Street
PO Box 5000
Station A
Sudbury Ontario P3A 5P3

Dear Sir,

On Thursday July 19th, 2012, the undersigned Railway Safety Inspector conducted monitoring activities at the Railway Crossing at Grade, Mile 79.43 Cartier Subdivision and Elm Street in the City of Sudbury.

During the monitoring activities, which were conducted between 1335 and 1430, the following observations were made;

- a) Four instances of westbound vehicle stopping the left hand lane of Elm Street to turn left into the "Surplus Liquidators" establishment. Subsequent traffic behind the left hand turning vehicle stopped so that they were fowl of the railway tracks.
- b) Two instances where eastbound vehicular traffic queued from the traffic signals at Elgin Street to the railway tracks, so that traffic stopped fowl of the railway tracks.
- c) One instance where westbound vehicle traffic queued from the traffic signals at Lorne Street to the railway tracks, so that traffic stopped fowl of the railway tracks.
- d) One instance where two trespassers were observed walking between the rails of the tracks from a point from the north to Elm Street.

EXHIBIT: C2

Further to the above monitoring activities, on August 1, 2012, a regulatory inspection of the Crossing Works at the Elm Street crossing was conducted by the undersigned inspector. During the inspection, the following was observed;

- a) Two additional instances were vehicular traffic queued from the traffic lights at Elgin Street to a point where the traffic was standing foul of the railway tracks.
- b) The white painted stop bars on the west side of the crossing are missing.
- c) The road way signage indicating to traffic to "Do Not Stop On Tracks" which have been located at this crossing historically are missing.

In conversation with CP Rail, it is my understanding that the City of Sudbury is conducting a pilot program where by vehicles are being permitted to park in the right hand lane of Elm Street during non rush hour periods between Elgin and Durham Street. As this practice effectively reduces the roadway from a four lane road to a two lane road, a natural traffic bottleneck occurs which may be contributing to the eastbound traffic queuing onto the railway tracks.

During the pilot project, and before parking be made permanent, it is recommended that the City of Sudbury undertake a traffic study to determine the frequency and severity that any new parking arrangement may have on vehicle traffic queuing onto the railway tracks on Elm Street.

The observed westbound traffic queue from the traffic lights at Lorne Street to the railway tracks was not as frequent as the eastbound traffic queue during the periods that traffic was observed. However, in conversation with CP Rail, during rush hour traffic, the westbound traffic queues from Lorne Street to the railway tracks on a regular basis. The City may also wish to further study the westbound traffic queuing issue as well to determine if any mitigating measures can be taken.

It should be pointed out that I can see the issue to traffic queuing over the tracks in both the eastward and westward directions becoming more intensified during the passage of a train when the traffic backs up while waiting for the train to clear the crossing. As the Elm Street crossing a three track crossing, the risk of a second train approaching the crossing as the first train clears presents a greater risk of possible train/vehicle collision to traffic being left stranded on the tracks.

Currently, CP Rail has a permanent 10 Mile per Hour slow order on the Elm Street crossing until the crossing is occupied. As trains due not whistle for this crossing, and until the traffic queuing issues are resolved, it is my opinion that the permanent 10 MPH slow order remain. I will communicate my opinion to the Railway.

I request that the City of Sudbury provide comment to the above within 30 days to the undersigned. I am willing to meet with the City as well as the Railway in an effort to find any solutions or address any concerns.

Sincerely,

Jeffrey Young, CET
Regional Railway Signal Systems Inspector
Transport Canada - Surface
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