

Request for Decision

Pedestrian Traffic Signal Request - Regent Street at Junction Creek Crossing

Presented To:	Operations Committee
Presented:	Monday, Dec 05, 2016
Report Date	Thursday, Nov 17, 2016
Type:	Managers' Reports

Resolution

THAT the City of Greater Sudbury installs signs encouraging trail users and employees of Greater Sudbury Utilities to utilize the protected pedestrian crossings at the existing traffic signals at the intersections of Regent Street and McLeod Street and Regent Street and Ontario Street;

AND THAT the City of Greater Sudbury provide a signed bicycle route from where the Junction Creek Waterway Park crosses McLeod Street to the north end of Wellington Heights as outlined in Exhibit A of the report dated November 17, 2016 from the General Manager of Infrastructure Services.

Background

Roads and Transportation Services staff received a proposal from the Rainbow Routes Association requesting mid-block pedestrian signals be installed on Regent Street where it crosses Junction Creek to help provide a safe passage for users of the Junction Creek Waterway Park and employees of Greater Sudbury Utilities who utilize the parking lot on the west side of Regent Street and must cross the road to access the Greater Sudbury Utilities offices. The proposal was submitted on behalf of the Rainbow Routes Association, Connect the Creek Partnership and Greater Sudbury Utilities (GSU).

Regent Street crosses Junction Creek approximately 200 metres north of McLeod Street and 215 metres south of Ontario Street (see Exhibit A). There are traffic signals installed at both of these intersections which provide pedestrians a protected pedestrian crosswalk. The Junction Creek Waterway Park/Trans Canada Trail follows Junction Creek from McLeod Street to Regent Street and then continues west from Regent Street to Riverside Drive. The parking lot utilized by GSU staff is located directly north of Junction Creek on the west side of Regent Street.

On June 10th, 2014, City staff counted the number of pedestrians and cyclists which crossed Regent Street in the area of Junction Creek from 5 AM to 10 PM. During the entire 17 hours counted, a total of 101 pedestrians (1 child, 94 adults, 6 seniors) and 22 bicycles crossed Regent Street. Book 12 of the Ontario Traffic Manual provides guidelines for the minimum pedestrian volume required before pedestrian traffic

Signed By

Report Prepared By

Joe Rocca
Traffic and Asset Management
Supervisor
Digitally Signed Nov 17, 16

Division Review

David Shelsted
Director of Roads & Transportation
Services
Digitally Signed Nov 17, 16

Recommended by the Department

Tony Cecutti
General Manager of Infrastructure
Services
Digitally Signed Nov 17, 16

Recommended by the C.A.O.

Ed Archer
Chief Administrative Officer
Digitally Signed Nov 20, 16

signals are warranted. The Ontario Traffic Manual (OTM) is a series of books published by the Province of Ontario which provides information and guidance for transportation practitioners in order to promote uniform design, application and operation of traffic control devices and systems across Ontario. Installing traffic control devices in a manner that is uniform across the province helps simplify transportation for all road users and helps create roads which are safer overall. Book 12 of the OTM specializes in traffic signals and provides guidance for what circumstances traffic signals should be installed, how they are designed and constructed and how they are operated.

This warrant provided in Book 12 is based on the eight busiest hours of the day and considers the number of equivalent adults crossing the road and the traffic volume of the road. Equivalent adults are calculated by multiplying the total number of children, seniors or persons with a disability by a factor of two and summing that total with the number of adults counted. For the eight busiest hours of the day, this area of Regent Street has a total vehicle volume of 8,750. For a road with this vehicle volume, the OTM requires a total of 257 pedestrians crossing the main road to warrant pedestrian traffic signals. From the June 2014 traffic count, a total of 116 equivalent adults and bicycles crossed Regent Street during the same eight hour period. This meets 45% of the pedestrian crossing volume required by the OTM to warrant pedestrian traffic signals.

Staff also considered a pedestrian crossover at this location. OTM Book 15 provides guidelines for what type of pedestrian crossover is appropriate based on the eight hour traffic volume, posted speed limit and the total number of lanes that need to be crossed. For a four lane road with a posted speed limit of 50 km/h and eight hour vehicle volumes of 8,750, OTM Book 15 does not recommend the installation of a pedestrian crossover.

Staff reviewed video of the traffic count that was completed and noted several items. The desire line of users of the Junction Creek Waterway Park does not match the desire line of GSU employees. The users of the Junction Creek Waterway Park typically crossed on or near the bridge over Junction Creek while GSU employees crossed approximately 50 to 100 metres further north. This is expected because the entrance to both the GSU parking lot and building are north of Junction Creek. Historically, staff have observed that pedestrians do not go out of their way to use traffic signals to cross the road. Based on this experience, it is likely that some GSU employees will continue to cross at this location rather than at the pedestrian signals.

Additionally, staff observed repeated vehicle queue lengths which extended beyond the bridge over Junction Creek and out of the view of the camera. With the installation of pedestrian traffic signals, vehicle stop lines are set back 15 metres from the crosswalk. This additional set back may cause vehicles to spill into the Regent Street and McLeod Street signalized intersection, which is a safety concern. Although it is illegal to block an intersection, it is an unfortunate common occurrence on congested roads.

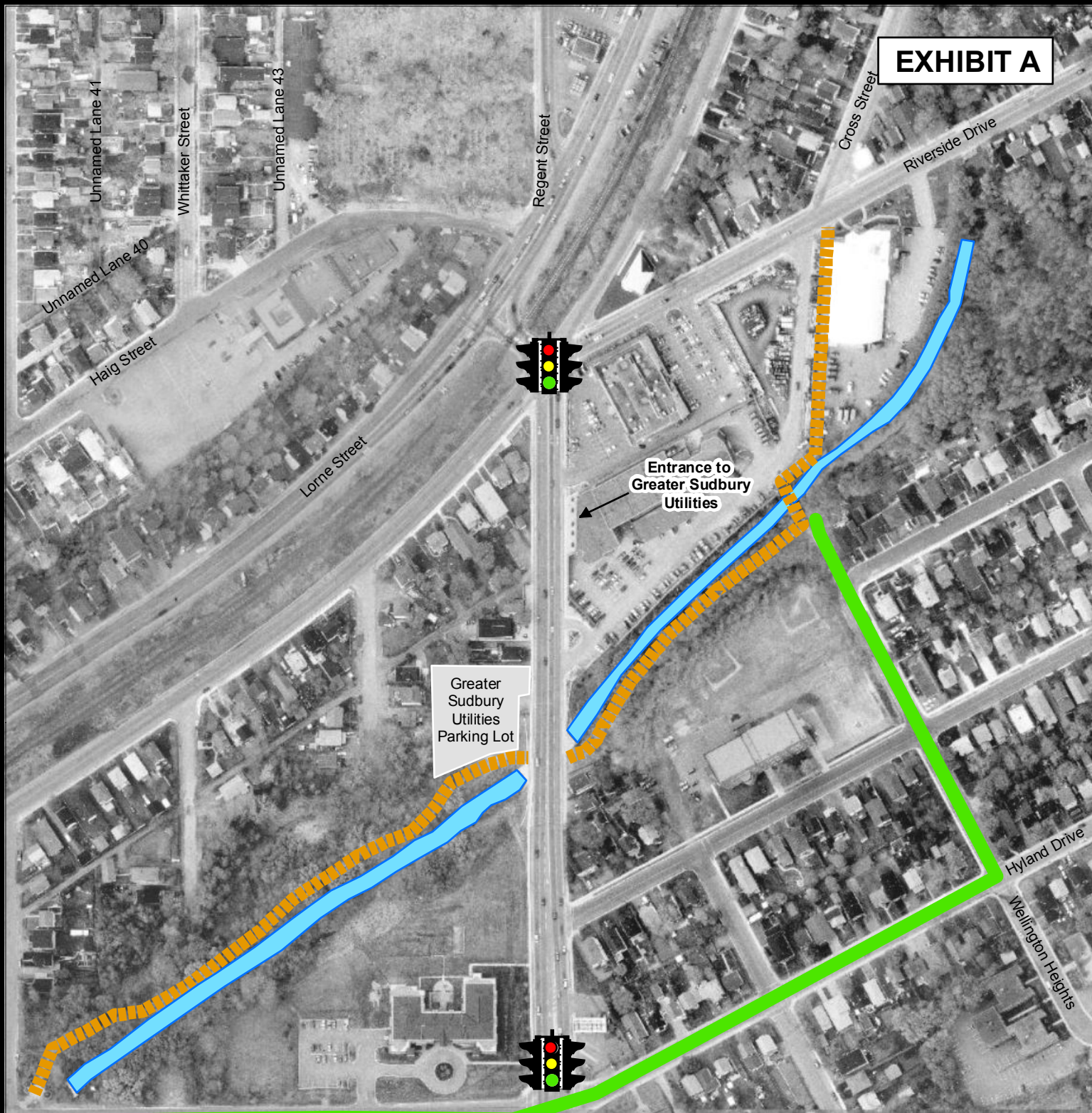
Although this proposal indicates that the Greater Sudbury Utilities and the Connect the Creek Partnership have committed funds to help pay for the construction of traffic signals at this location, the City of Greater Sudbury will be responsible for any funding shortfall and the ongoing maintenance of these traffic signals. Staff estimated that the installation of midblock pedestrian signals at this location will cost approximately \$120,000 and maintenance costs at these types of signals typically cost \$2,000 per year. In addition, the City would be responsible for eventual replacement of the traffic signals at the end of their 20 year life cycle.

Staff does not recommend the installation of these traffic signals. Based on the traffic counts completed, this location does not meet the minimum pedestrian volumes required in the Ontario Traffic Manual. By installing these signals, each pedestrian or cyclist will save only 400 metres of walking while decreasing the overall safety of this area. While traffic signals are not recommended at this location, staff understands the importance of pedestrian safety along the Junction Creek Waterway Park and reviewed all of the remaining




road crossings along the route. Based on this review, staff recommended the installation of pedestrian crossovers on Riverside Drive near Cross Street, Bond Street near Murray Street and Madison Avenue near Sagebrush Place. Installation of these pedestrian crossovers is expected to be completed by the end of November 2016.

Although a review of the collision history from 2011 to 2015 revealed that there were no collisions involving pedestrians or cyclists trying to cross Regent Street near this location, employees of Greater Sudbury Utilities and trail users should be encouraged to utilize the protected pedestrian crossings at the nearby traffic signals. Instead of pedestrian traffic signals, staff recommends that signs be posted at each trailhead and the exit to the GSU parking lot to educate users that protected pedestrian crossings are available at the traffic signals at McLeod Street and Ontario Street. In addition, staff recommends providing a signed bicycle route which would encourage trail users to use the existing traffic signals at the intersection of Regent Street and McLeod Street and is only 150 metres longer than if users stayed on the trail. This alternate route is depicted on Exhibit A.

EXHIBIT A



LEGEND

-  Junction Creek Waterway Park/Trans Canada Trail
-  Alternate Signed Route
-  Junction Creek

Pedestrian Traffic Signal Request
Regent Street at Junction Creek
April 8, 2016