

# **CITY OF HAMILTON** *PUBLIC WORKS DEPARTMENT* Corporate Assets & Strategic Planning Division

то:	Chair and Members
10.	Public Works Committee
COMMITTEE DATE:	June 13, 2016
SUBJECT/REPORT NO:	Wentworth Street South Rail Trail Crossing and Traffic Calming Measures on Charlton Avenue East (PW15021a) (Wards 2 and 3) (Outstanding Business :List Item)
WARD(S) AFFECTED:	Wards 2 and 3
PREPARED BY:	Aneta Zaszkowska Traffic Safety Technologist 905-546-2424, Ext. 5663
	Martin White, C.E.T., Manager Traffic Operations and Engineering 905-546-2424, Ext. 4345
SUBMITTED BY:	Geoff Lupton Director, Energy, Fleet & Traffic Public Works Department
SIGNATURE:	

## RECOMMENDATION

- (a) That a Pedestrian Signal be installed on Wentworth Street South at the Wentworth Street Rail Trail Crossing as part of the 2017 capital budget process; to be funded 50% from Ward 2 Area Rating and 50% from Red Light Camera Reserve 112203;
- (b) That this subject matter be identified as completed and removed from the Public Works Committee Outstanding Business List.

# **EXECUTIVE SUMMARY**

At the June 2, 2014 Public Works Committee, a delegation was received from Matthew Froese respecting the installation of Traffic Calming Measures on Charlton Avenue East, in the vicinity of the Wentworth Street stairs and the Escarpment Rail Trail.

Council received the delegation and approved the following recommendations:

- (a) That staff be directed to report to the Public Works Committee with a full assessment of the options which can be taken to mitigate concerns respecting safety on Wentworth Street South at the Rail Trail Crossing; and
- (b) That the report include measures to look at the Installation of Traffic Calming Measures on Charlton Avenue East.

## SUBJECT: Wentworth Street South Rail Trail Crossing and Traffic Calming Measures on Charlton Avenue East (PW15021a) (Wards 2 and 3) - Page 2 of 6

In response to this Council direction, the foliage along the Mountain access was immediately trimmed to uncover partially obscured traffic warning signs and the Rail Trail guardrail was relocated and two maintenance openings were eliminated, to prohibit vehicle access to the pedestrian area. Public Works Committee Report PW15021 was prepared and the following recommendations were approved at Council on April 8, 2015:

- (a) That staff be directed to install a designated Pedestrian Crossing on Wentworth Street South at Cumberland Avenue, upon the approval of legislative amendments to the Highway Traffic Act (HTA) by the Province of Ontario;
- (b) That staff be directed to set the posted speed limit to 40km/h on Wentworth Street South and Charlton Avenue East, from Cumberland Avenue to the Sherman Access;
- (c) That \$150,000 from the Ward 2 Area Rating Funding is used for the installation of enhanced pedestrian warning signage and overhead beacons;
- (d) That staff be directed to modify the pavement markings through this section of Wentworth Street South to assist with enhancing pedestrian safety;
- (e) That staff report back to the Public Works Committee in April of 2016 with an assessment of the effectives of the Wentworth Street South Rail Trail Crossing and Traffic Calming Measures on Charlton Avenue East and include in the report a cost estimate for installing a pedestrian bridge;

Following Council approval of PW15021 the following actions were taken:

- 1. Overhead Pedestrian Warning Signs and flashing beacons were installed on new poles to highlight the presence of pedestrians in the area of the Wentworth Street South Rail Trail.
- 2. The speed limit on Charlton Avenue East and Wentworth Street South in the area of the Rail Trail was reduced from 50 km/hr to 40 km/hr.
- 3. Lane width reductions and pavement marking modifications have been designed for Wentworth Street South between Stinson Street and Cumberland Avenue. These changes have been incorporated into the Wentworth Street two-way conversion project which is scheduled for completion in the summer of 2016.
- 4. As directed, staff investigated the cost to construct a pedestrian bridge to create a grade separated trail crossing. Using the Ministry of Transportation Ontario Parametric Estimating Guide for new structures (All Types & Material), the cost of the bridge structure is estimated at \$535,000. This is a high level cost estimate without consideration for potential utility works or additions to ensure compliance with the Accessibility for Ontarians with Disabilities Act (AODA) requirements. Staff do not recommend pursuing the installation of a Pedestrian Bridge as it is felt the crossing issues can be safely addressed by the recommendation for a full pedestrian signal as outlined in this report.

OUR Vision: To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities. OUR Mission: WE provide quality public service that contribute to a healthy, safe and prosperous community, in a sustainable manner. OUR Values: Accountability, Cost Consciousness, Equity, Excellence, Honesty, Innovation, Leadership, Respect and Teamwork

## SUBJECT: Wentworth Street South Rail Trail Crossing and Traffic Calming Measures on Charlton Avenue East (PW15021a) (Wards 2 and 3) - Page 3 of 6

After further review and investigation staff has identified the need to protect pedestrians crossing Wentworth Street South in the vicinity of the Rail Trail. Working in partnership with the area councillors, staff is recommending that the safest method to cross Wentworth/Charlton is to install a full Pedestrian Signal in the vicinity of the Trail Crossing. The Pedestrian Traffic Signal will provide a controlled location and provide pedestrians the right-of-way over vehicles when crossing the roadway at this location. Design of this Pedestrian Signal will require special consideration for vehicular operator sightlines due to the grade and geometry adjacent to the Rail Trail. Furthermore, staff will be considering the following criteria unique to the Rail Trail in the design of the signal:

- (a) Enhanced pavement markings.
- (b) Installation of trail feature to emphasize the location of the trail crossing to drivers (gateway feature, decorative signage etc.).
- (c) Street and trail lighting review to ensure trail users are visible during low light conditions and to identify and emphasize the location of the trail and crossing to motorists.
- (d) Landscaping modifications to enhance sightlines by grooming vegetation and improving grading on the northwest corner where Charlton Avenue East meets Wentworth Street South.
- (e) Requirement for railway signal pre-emption to clear the railroad tracks of stopped vehicles when a train approaches.

# Alternatives for Consideration – See Page 5

# FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: The cost to install the pedestrian signal is estimated to be \$300,000. It is recommended that this signal be funded through the 2017 capital budget process; to be funded 50% from Ward 2 Area Rating (not to exceed the designated \$150,000) and a minimum of 50% from Red Light Camera Reserve 112203.

Staffing: No staff impacts are related to this report.

Legal: There are no Legal implications as a result of this report.

# HISTORICAL BACKGROUND

At the June 2, 2014 Public Works Committee, a delegation was received from Matthew Froese respecting the installation of Traffic Calming Measures on Charlton Avenue East, in the vicinity of the Wentworth Street stairs and the Escarpment Rail Trail.

Council received the delegation and approved the following recommendations:

## SUBJECT: Wentworth Street South Rail Trail Crossing and Traffic Calming Measures on Charlton Avenue East (PW15021a) (Wards 2 and 3) - Page 4 of 6

- (a) That staff be directed to report to the Public Works Committee with a full assessment of the options which can be taken to mitigate concerns respecting safety on Wentworth Street South at the Rail Trail Crossing; and
- (b) That the report include measures to look at the Installation of Traffic Calming Measures on Charlton Avenue East.

In response to this Council direction, the foliage along the Mountain access was immediately trimmed to uncover partially obscured traffic warning signs and the Rail Trail guardrail was relocated and two maintenance openings were eliminated, to prohibit vehicle access to the pedestrian area. Public Works Committee Report PW15021 was prepared and the following recommendations were approved at Council on April 8, 2015:

- (a) That staff be directed to install a designated Pedestrian Crossing on Wentworth Street South at Cumberland Avenue, upon the approval of legislative amendments to the Highway Traffic Act (HTA) by the Province of Ontario;
- (b) That staff be directed to set the posted speed limit to 40km/h on Wentworth Street South and Charlton Avenue East, from Cumberland Avenue to the Sherman Access;
- (c) That \$150,000 from the Ward 2 Area Rating Funding is used for the installation of enhanced pedestrian warning signage and overhead beacons;
- (d) That staff be directed to modify the pavement markings through this section of Wentworth Street South to assist with enhancing pedestrian safety;
- (e) That staff report back to the Public Works Committee in April of 2016 with an assessment of the effectives of the Wentworth Street South Rail Trail Crossing and Traffic Calming Measures on Charlton Avenue and include in the report a cost estimate for installing a pedestrian bridge;

Following approval of PW15021 the following actions were taken:

- 1. Overhead Pedestrian Warning Signs and flashing beacons were installed on new poles to highlight the presence of pedestrians in this area of the Wentworth Street South Rail Trail.
- 2. The speed limit on Charlton Avenue East and Wentworth Street South in the area of the Rail Trail was reduced from 50 km/hr to 40 km/hr.
- 3. Lane width reductions and pavement marking modifications have been designed for Wentworth Street South between Stinson Street and Cumberland Avenue. These changes have been incorporated into the Wentworth Street two-way conversion project which is scheduled for completion in the summer of 2016.
- 4. As directed, staff investigated the cost to construct a pedestrian bridge to create a grade separated trail crossing. Using the Ministry of Transportation Ontario Parametric Estimating Guide for new structures (All Types & Material), the cost of

OUR Vision: To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities. OUR Mission: WE provide quality public service that contribute to a healthy, safe and prosperous community, in a sustainable manner. OUR Values: Accountability, Cost Consciousness, Equity, Excellence, Honesty, Innovation, Leadership, Respect and Teamwork

the bridge structure is estimated at \$535,000. This is a high level cost estimate without consideration for potential utility works or additions to ensure compliance with the Accessibility for Ontarians with Disabilities Act (AODA) requirements. Staff do not recommend pursuing the installation of a Pedestrian Bridge as it is felt the crossing issues can be safely addressed by the recommendation for a full pedestrian signal as outlined in this report.

Bridge Width	4 meters
Bridge Span Length	25 meters
Deck Surface Cost per m <sup>2</sup>	\$4,860
Total Cost	\$486,000
Total Cost + 10%	\$534,600

 Table 1 - Cost Estimate Calculations for Pedestrian Bridge

After further review and investigation staff has identified the need to protect pedestrians crossing Wentworth Street South in the vicinity of the Rail Trail. Working in partnership with the area councillors, it is recommended that the safest method to cross Wentworth/Charlton is to install a full Pedestrian Signal in the vicinity of the Rail Trail Crossing. The Pedestrian Traffic Signal will provide a controlled location and provide pedestrians the right-of-way over vehicles when crossing the roadway at this location. Design of this Pedestrian Signal will require special consideration for vehicular operator sightlines due to the grade and geometry adjacent to the Rail Trail.

# POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

There are no Policy or Legislated requirements as part of this report.

# **RELEVANT CONSULTATION**

Multiple divisions throughout Public Works such as Engineering Services as well as Ward 2 and 3 Councillors have been involved in this report and the actions completed to date and those that are proposed.

# ANALYSIS AND RATIONALE FOR RECOMMENDATION

Upon further review and investigation of the area, staff identified that the most appropriate course of action for pedestrian safety would be to install a Pedestrian Signal which would provide the pedestrian the right-of-way over vehicular traffic A Pedestrian signal better serves the trail users however it does pose several challenges:

- Safety concerns with proximity of Rail Trail crossing to the Railroad crossing potential of vehicles stopped on rail tracks when stopping to trail users.
- CP Rail Evaluation the Rail Company may need to evaluate the proposal to ensure it meets safety guidelines (clearance zones). Staff have begun consultation with the railway operator.

## SUBJECT: Wentworth Street South Rail Trail Crossing and Traffic Calming Measures on Charlton Avenue East (PW15021a) (Wards 2 and 3) - Page 6 of 6

## ALTERNATIVES FOR CONSIDERATION

No further action can be taken on this matter however; this will not enhance pedestrian safety at this location.

A Pedestrian Crossover could be installed instead of a Traffic signal but a pedestrian crossover would be inappropriate at this location due to design constraints and visibility constraints and poor roadway geometrics. The vehicle operators would not be able to identify pedestrians in the crosswalk in time to stop safely.

### ALIGNMENT TO THE 2012 – 2015 STRATEGIC PLAN

#### Strategic Priority #2

Valued & Sustainable Services

WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner

#### **Strategic Objective**

2.2 Improve the City's approach to engaging and informing citizens and stakeholders.

2.3 Enhance customer service satisfaction.

## APPENDICES AND SCHEDULES ATTACHED

None