



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

TO:	Mayor and Members General Issues Committee
COMMITTEE DATE:	November 25, 2016
SUBJECT/REPORT NO:	Delineated Bicycle Lane on the Claremont Access (PW16003a) (Wards 2, 7 and 8)
WARD(S) AFFECTED:	Wards 2, 7 and 8
PREPARED BY:	Daryl Bender, B.E.S. Project Manager, Alternative Transportation (905) 546-2424 Extension 2066 Martin White, C.E.T. Manager Traffic Operations and Engineering (905) 546-2424 Extension 4345
SUBMITTED BY:	Geoff Lupton Director, Energy, Fleet & Traffic Public Works
SIGNATURE:	

RECOMMENDATION

- (a) That staff be directed to prepare a detailed design for a two-way cycling and multi-use trail facility on the north side of the Claremont Access, at a cost of \$200,000 to be funded from the Red Light Camera Reserve Account: 112203, and report back to the General Issues Committee in 2017;
- (b) That staff be directed to include in the report, respecting the design for a two-way cycling and multi-use trail facility on the north side of the Claremont Access, all associated construction costs; and,
- (c) That staff be directed to provide a proposed funding model that would include possible Provincial and/or Federal Grant funding that could offset some or all of the project design and construction costs for the two-way cycling and multi-use trail facility on the north side of the Claremont Access.

EXECUTIVE SUMMARY

At the General Issues Committee on January 19, 2016, staff was directed to investigate options for a delineated bicycle lane on the Claremont Access that would include, but not be limited to, a review of the following design considerations and report back to the General Issues Committee for consideration during the 2017 Capital Budget process. The direction reference is titled Delineated Bicycle Lane on the Claremont Access (PW16003):

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Annual Operating and Maintenance: \$40,000

Staffing: No impacts identified.

Legal: No impacts identified. The project will include suitable measures to address risks to users.

HISTORICAL BACKGROUND

At the General Issues Committee on January 19, 2016 staff was directed to investigate options for a delineated bicycle lane on the Claremont Access that would include, but not be limited to, a review of the following design considerations and report back to the General Issues Committee for consideration during the 2017 Capital Budget process. The direction reference is titled Delineated Bicycle Lane on the Claremont Access (PW16003) (Wards 2, 7 and 8) (Item 4.1)

- (i) Public input;
- (ii) Connectivity options;
- (iii) Safety considerations;
(e.g. Potential conflict points between cyclists, pedestrians and vehicles);
- (iv) Collision data;
- (v) Current and future traffic capacity and routing;
- (vi) Operations and maintenance (e.g. Street sweeping and winter control);
- (vii) Design options;
- (viii) A review of potential funding sources;
- (ix) Project co-ordination; and,
- (x) Project priority in the context of already approved cycling infrastructure projects

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The final project design will identify if the City requires Niagara Escarpment Commission (NEC) approval.

RELEVANT CONSULTATION

As part of the Public Consultation process, a Public Information Centre (PIC) meeting was held on August 16, 2016. This PIC meeting was attended by approximately 60 residents. The meeting was advertised in the Hamilton Spectator, on the City website, and a notice was delivered to properties in the vicinity of the study area. The information from the PIC was posted on the City website to encourage additional community input.

Community feedback from the PIC strongly supported Option 1, including the need to install a physical barrier separating the multi-use trail from vehicular traffic on the Claremont Access.

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In addition, the City’s consultant undertook consultation with the Hamilton Cycling Committee and the Niagara Escarpment Commission.

Consultation is also underway with the following internal and external stakeholders;

- Bruce Trail Conservancy
- Advisory Committee for Persons with Disabilities
- Seniors Advisory Committee.
- Landscape Architectural Services
- Parks and Cemeteries
- Road Operations
- Engineering Services
- Emergency Services Departments (EMS, Fire, Hamilton Police Service)
- Transportation Management
- Forestry
- Development Planning
- LRT Office.

Wards 2, 3, 7, and 8 are adjacent to the project. Councillors from these wards received notification of the PIC. Some Councillor’s staff attended this meeting and provided additional comments

The following Table-2 summarizes the input received from attendees of the PIC:

Table 2 - Comparison of the Three Options Considered for the Claremont Access

Level of Support Public/Design Rating - (Poor to Medium to Good)			
Design and Evaluation Consideration	<u>Option 1</u> Two-way facility on the north side	<u>Option 2</u> Two-way facility on the south side	<u>Option 3</u> Separate one-way facilities on each side
Public Consultation	Good	Poor	Medium
Connectivity Options	Good	Poor	Medium
Safety Considerations	Good	Good	Poor
Collision Rating	Good	Good	Poor
Impact to LOS	Good	Good	Good
Operations and	Medium	Medium	Poor

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Level of Support Public/Design Rating - (Poor to Medium to Good)			
Design and Evaluation Consideration	<u>Option 1</u>	<u>Option 2</u>	<u>Option 3</u>
	Two-way facility on the north side	Two-way facility on the south side	Separate one-way facilities on each side
Maintenance			
Design	Good	Poor	Medium
Funding	Medium	Medium	Poor
Project Co-ordination	Good	Poor	Poor
Project Priority	Medium	Medium	Medium

ANALYSIS AND RATIONALE FOR RECOMMENDATION

As per the direction from Council, staff evaluated the three potential design options based on the Council directed ten design considerations. The investigation of these considerations is described below.

Option 1 – Two-Way facility on the north side of Claremont Access

This is the recommended preferred option because it provides suitable separation between bicycle and vehicular traffic and good connectivity to cycling facilities above and below the escarpment. The favourable connectivity to bicycle and pedestrian amenities in this option is expected to generate pedestrian usage; therefore a multi-use trail design is being recommended. The detailed design would include Safety considerations for design elements to minimize conflicts between cyclists, pedestrians, and other mobility devices and up-bound vehicular traffic.

Speed differential between up-bound and down-bound cycle traffic has been identified as a significant safety issue that will need to be addressed in the detailed design. In order to address the safety concerns, the detailed design will include investigation of suitable trail width; design elements to moderate down-bound cycling speed; and separation of up-bound/down-bound cyclists.

Option 1 meets the goals and objectives of the Cycling Master Plan, the City-Wide Transportation Master Plan, the Recreational Trails Master Plan and the Pedestrian Mobility Plan, due to the continuous and seamless integration of a multi-use trail for cycling and pedestrian connectivity.

Option 1 provides connectivity to Southam Park; the south side of Arkledun Ave/Jolley Cut; the north side of Arkledun Ave/Jolley Cut; St. Joseph’s Drive, and West Avenue.

Option 2 – Two-Way facility on the south side of the Claremont Access

This option was not identified as the preferred option because it does not provide convenient side connections as does the north side option (Option 1). This option

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would also create connection issues for West 5th Street, Hunter Street and Charlton Avenue which would need to be explored in more detail and will increase the overall costs of this project. This type of facility would not allow for the implementation of a multi-use trail facility due to the lack of available connectivity to the adjacent network. The implementation of this cycling facility would also require the completion of Slope Stabilization along the Escarpment face, resulting in significant rehabilitation costs and time, prior to the implementation of a cycling facility.

Option 3: Separate Cycling Facilities north and south side

A separate cycling facility for the two directions of bicycle traffic, with up bound cyclists on the north side and down bound cyclists on the south side; would appear as a logical solution. However, due to traffic volume, speed and speed differential both directions would require the installation of separation barriers between vehicular traffic and bicycle traffic. This will increase overall project costs. This option would also require the completion of Slope Stabilization along the Escarpment face, resulting in significant rehabilitation costs and time, prior to the implementation of the south-side portion.

The estimated projects costs for the three options are listed in Table 1:

Table 1 – Estimated Project Capital and Operating Costs

Estimated Costs	Option 1 Two-Way North Side	Option 2 Two-Way South Side	Option 3 One-Way Each Side
Design and Construction	\$2.3 Million	\$2.3 Million	\$2.5 Million
Annual Operating and Maintenance	\$40,000	\$40,000	\$80,000

Note: Construction of Options 2 and 3 would also require additional significant investments for Escarpment Slope Stabilization which is not identified in this report.

Breakdown of Estimated Option’s Costs

Option 1 – Two-Way North Side

Main route (West 5th Street to Hunter Street)	\$1.7 million
Southam Park connection	\$105,000
The two Arkledun/Jolley-Cut connections	\$125,000
St. Joseph’s Drive connection	\$115,000
West Avenue connection	\$10,000

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Design \$ 200,000

Total estimated construction cost \$2.3 million

Estimated annual operating/maintenance costs \$40,000

Option 2 – Two-Way South Side

Main route (Upper James to Charlton/Victoria) \$1.4 million

West 5th to Upper James connection \$500,000

Sherman Access to Charlton \$200,000

Design \$200,000

Total estimated construction cost \$2.3 million

Estimated annual operating/maintenance costs \$40,000

Note: Option 2 requires the Escarpment Slope Stabilization to be completed at significant cost.

Option 3 – One-Way Each Side

Main route bike lanes, up bound and down bound \$2.0 million

Southam Park connection \$105,000

The two Arkledun/Jolley-Cut connections \$125,000

St. Joseph's Drive connection \$115,000

West Avenue connection \$10,000

Design \$ 200,000

Total estimated construction cost \$2.5 million

Estimated annual operating/maintenance costs \$80,000

Note: Option 3 requires the Escarpment Slope stabilization to be completed at significant cost.

In Summary, Option 1 – Two-Way cycling and multi-use trail facility on the north side of Claremont Access, is the highest rated option. It provides the best opportunity for cycling connectivity; it encourages pedestrian connections, and will provide separation from vehicular traffic on the access. A conceptual plan of this design option is shown in Appendix A.

ALTERNATIVES FOR CONSIDERATION

Council could choose to direct staff to include the estimated cost for project construction in the 2017 Capital Budget process. Council may also decide to discontinue the project and dedicate resource to other council priorities. The time required for a possible permit

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from the Niagara Escarpment Commission (NEC) supports a post 2017 implementation schedule.

Council could direct staff to further study the south side (Option 2) of the Claremont Access for a two-way cycling facility, but sufficient safe road width is currently unavailable due to the slope stabilization requirements currently being investigated. The south side of this 2.5 kilometre long escarpment access also does not provide the multiple opportunities for side connections as does the north side of the access.

One-Way Each Side (Option 3) is another alternative that could be considered, but is the most costly and complex option to implement and also has slope stabilization requirements.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Community Engagement & Participation

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Healthy and Safe Communities

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

Culture and Diversity

Hamilton is a thriving, vibrant place for arts, culture, and heritage where diversity and inclusivity are embraced and celebrated.

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

APPENDICES AND SCHEDULES ATTACHED

Appendix A – Claremont Access Proposed Multi-use Trail (Brantdale Avenue to Hunter Street) with Proposed Connectors.

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