Trails and Active Transportation Committee Meeting Agenda

Friday, November 18, 2016
10 a.m.

Council Chambers
Aurora Town Hall
Town of Aurora
Trails and Active Transportation Committee
Meeting Agenda

Date: Friday, November 18, 2016
Time and Location: 10 a.m., Council Chambers, Aurora Town Hall

1. Declaration of Pecuniary Interest and General Nature Thereof

2. Approval of the Agenda

   Recommended:

   That the agenda as circulated by Legislative Services be approved.

3. Receipt of the Minutes

   Trails and Active Transportation Committee Meeting Minutes of September 16, 2016

   Recommended:

   That the Trails and Active Transportation Committee meeting minutes of September 16, 2016, be received for information.

4. Delegations

   (a) Fausto Filipetto, Senior Policy Planner, Town of Aurora
       Re: Library Square and Town Park
(b) Klaus Wehrenberg, Resident  
Re: Item 1 – Extract from Council Meeting of October 11, 2016; Re: Item 1(6), Report No. PRCS16-044 – Leslie Street Underpasses Construction

5. Matters for Consideration

1. Extract from Council Meeting of October 11, 2016  
Re: Item 1(6), Report No. PRCS16-044 – Leslie Street Underpasses Construction

Recommended:

1. That the Extract from Council Meeting of October 11, 2016, regarding Item 1(6), Report No. PRCS16-044 – Leslie Street Underpasses Construction, and previous reports and background, be received; and

2. That the Trails and Active Transportation Committee provide comment on the usefulness of Underpass C and whether it is needed in the Trails Master Plan.

6. Informational Items

2. Bike Aurora Update

Recommended:

1. That the Bike Aurora Update be received for information.

3. Extract from Council Meeting of October 11, 2016  
Re: Trails and Active Transportation Committee Meeting Minutes of September 16, 2016

Recommended:

1. That the Extract from Council Meeting of October 11, 2016, regarding the Trails and Active Transportation Committee meeting minutes of September 16, 2016, be received for information.
7. New Business

8. Adjournment
The Chair called the meeting to order at 10:08 a.m.

1. **Declaration of Pecuniary Interest and General Nature Thereof**

   There were no declarations of pecuniary interest and general nature thereof under the *Municipal Conflict of Interest Act*.

2. **Approval of the Agenda**

   **Moved by Laura Lueloff**
   **Seconded by Richard Doust**

   That the agenda as circulated by Legislative Services, with the following addition, be approved:
3. Receipt of the Minutes

Trails and Active Transportation Meeting Committee Minutes of June 17, 2016

Moved by Bill Fraser
Seconded by Nancy Webb

That the Trails and Active Transportation Committee meeting minutes of June 17, 2016, be received for information.

Carried

4. Delegations

On a motion of Richard Doust seconded by Laura Lueloff, the Committee consented on a two-thirds vote to waive the requirements of the Procedural By-law to allow for the addition of Delegation (b) Angela Sciberras, Macaulay Shiomi Howson Ltd., representing Treasure Hill Homes; Re: Trail Connections for Proposed Plan of Subdivision, 1289 Wellington Street East.

(a) Eric McCartney, Resident
Re: Item 1 – Atkinson Park Trail Extension to St. John’s Sideroad

Mr. McCartney spoke in support of the memorandum and noted the benefits of providing a trail connection from Atkinson Park to the south side of St. John’s Sideroad. He presented a video of the Atkinson Park Trail and noted the trail and overpass improvements needed, and parking issues.

Moved by Nancee Webb
Seconded by Alison Collins-Mrakas

That the comments of the delegation be received for information.

Carried
(b) Angela Sciberras, Macaulay Shiomi Howson Ltd., representing Treasure Hill Homes

Re: Trail Connections for Proposed Plan of Subdivision, 1289 Wellington Street East

In response to a comment raised by Council at the June 29, 2016 Public Planning meeting, Ms. Sciberras introduced the proposed draft Plan of Subdivision application and acknowledged Council’s comment with regard to a possible trail connection from the subject property to the trail system as identified within the Town’s Trails Master Plan. She confirmed that the trails within the Town’s Trails Master Plan are located outside of the subject property, and acknowledged the possibility of a trail connection, from the easterly portion of the property or along the north side of the subject property on Wellington Street East, to the planned trail as indicated on the Town’s Trails Master Plan. Ms. Sciberras advised that this matter would be taken into consideration by the developer.

Moved by Nancee Webb
Seconded by Alison Collins-Mrakas

That the comments of the delegation be received for information.  

Carried

5. Matters for Consideration

None

6. Informational Items

1. Memorandum from Manager of Parks

Re: Atkinson Park Trail Extension to St. John’s Sideroad

Staff provided an overview of the memorandum and responded to Committee inquiries about the population served by the trail and possible flood plain issues. The Committee suggested that further data and consultation is needed.
Moved by Laura Lueloff  
Seconded by Alison Collins-Mrakas

1. That the memorandum regarding Atkinson Park Trail Extension to St. John’s Sideroad be received; and

2. That the Trails and Active Transportation Committee recommend to Council:
   
   a) That staff be directed to investigate the cost of the proposed Atkinson Park trail extension, consult with Lake Simcoe Region Conservation Authority and York Region, and report back to the Trails and Active Transportation Committee for consideration.
   
   Carried as amended

2. Memorandum from Manager of Parks
   Re: Lake to Lake Trail Update

   Staff provided background to the Aurora component of the proposed Lake to Lake Cycling Route and Walking Trail between Lake Simcoe and Lake Ontario, and noted that the proposal was satisfactory in principle.

Moved by Councillor Mrakas  
Seconded by Nancee Webb

1. That the memorandum regarding Lake to Lake Trail Update be received; and

2. That the Trails and Active Transportation Committee recommend to Council:
   
   a) That the draft plan of the proposed Lake to Lake Cycling Route and Walking Trail be publicly communicated.
   
   Carried as amended

3. Memorandum from Mayor Dawe
The Committee inquired about formal protection of trails in relation to current or pending legislation. Staff advised that the Town’s Trails Master Plan, as part of the Official Plan, offers good protection. The Committee suggested that the memorandum be shared further on a General Committee meeting agenda.

Moved by Alison Collins-Mrakas  
Seconded by Richard Doust

1. That the memorandum regarding Conservation Ontario Council Report – Passage of Bill 100 *Supporting Ontario Trails Act*, 2016 be received for information.

Carried

4. Extract from Council Meeting of July 12, 2016  
Re: Trails and Active Transportation Committee Meeting Minutes of June 17, 2016

Moved by Alison Collins-Mrakas 
Seconded by Councillor Mrakas

1. That the Extract from Council Meeting of July 12, 2016, regarding the Trails and Active Transportation Committee meeting minutes of June 17, 2016, be received for information.

Carried

7. New Business

The Committee discussed aspects of the proposed Bike Aurora initiative, including a possible connection to Activate Aurora. It was agreed to extend an invitation to representatives from Activate Aurora to present at the next Trails and Active Transportation Committee meeting. Councillor Humfryes noted that she would formulate a Notice of Motion regarding the Bike Aurora initiative for Council's consideration.
8. Adjournment

Moved by Alison Collins-Mrakas  
Seconded by Councillor Mrakas

That the meeting be adjourned at 10:58 a.m.  

Carried

Committee recommendations are not binding on the Town unless otherwise adopted by Council at a later meeting.
Background (Aurora Promenade)

- In 2009 the Town initiated a secondary planning process for the Downtown/Yonge Wellington Street Corridor

- This resulted in the creation of a Concept Plan - Urban Design Strategy for the area now known as “The Aurora Promenade”

- Implementing policies were included in the Town’s new Official Plan
Background (Cultural Precinct)

- Key Strategy is to reinforce and enhance a Cultural Precinct within the three block area of Library Square to the Town Park.
Background
(Cultural Precinct/Repurposing Study)

- Two studies were undertaken in 2015/2016:
  - Concept Plan for the Cultural Precinct
  - Repurposing Study

- Council directed Staff to consult on the results of the two studies in the Spring of 2016
Background (Public Consultation)

A public consultation strategy was endorsed by Council in June 2016 which included:

- Public Outreach (Survey/Questionnaire)
- On-line Survey
- Social Media Strategy
- Public Meetings
Background (Public Consultation)

- The Public Consultation focussed on Library Square and Town Park

- Staff conducted surveys during:
  - Concerts in the Park
  - Farmer’s Markets (Incl. Doors Open)
  - At the Aurora Public Library
Background (Library Square Concept)
Background (Town Park Concept)
What We Heard (Town Park)

- Don’t change Town Park (Approximately 33%)
- In favour of Proposed Concept Plan (Approximately 26%)
- Other (Approximately 41%)
What Else We Heard (Town Park)

- Like the Concept Plan but keep the Baseball Diamond
- Like/love the splash pad/skating rink
- Baseball Diamond is underutilized
- Need more seating and benches
- No need to change the bandshell
What To Do with the Armoury?
What To Do with the Armoury?

- Art Gallery/Studio (13 Respondents)
- Farmer’s Market/Artisan Fair (39 Respondents)
- Community Club House (14 Respondents)
- Restaurant, Café, Brewery, Winery (19 Respondents)
- All of above (4 Respondents)

Other popular responses: Snack Bar, Community Space, Vendor, Concert Venue
What We Heard (Library Square)

- Like the Proposed Concept Plan (Approximately 43%)
- Don’t Change Library Square (Approximately 14%)
- Other (Approximately 43%)
What Else We Heard
(Library Square)

- Like Concept Plan but concerned about height & density
- Parking Concerns
- Need more parking in the downtown
- Need more restaurants in the downtown
What To Do with the Former Library?
What To Do with the Former Library?

- Art Studio (7 Respondents)
- Meeting Hall (1 Respondent)
- Offices (2 Respondents)
- Community Club House (5 Respondents)
- Community Class Room (7 Respondents)
- Dance Studio (3 Respondents)
- All of above (1 Respondent)
- Other: Community Use, Retail, Parking, Museum
What To Do with the Former Seniors Centre?
What To Do with the Former Seniors Centre?

- Sports Hall of Fame (3 Respondents)
- Meeting Hall (2 Respondents)
- Offices (1 Respondent)
- Community Club House (5 Respondents)
- Community Class Room (2 Respondents)
- Art Studio (6 Respondents)
- Performing Art Studio (6 Respondents)
- All of Above (1 Respondent)
- Other: Community Use, Retail, Parking
Next Steps

October 19: Meeting with Library Board
October 24: Aurora Chamber of Commerce
October/November: Aurora Advisory Committees
November: Council Workshop
November/December: Council Action
Thank you!

- Questions/Comments/Discussion
DELEGATION REQUEST

This Delegation Request form and any written submissions or background information for consideration by either Council or Committees of Council must be submitted to the Clerk’s office by the following deadline:

4:30 P.M. ON THE BUSINESS DAY PRIOR TO THE REQUESTED MEETING DATE

COUNCIL/COMMITTEE/ADVISORY COMMITTEE DATE: NOV. 18, 2016

SUBJECT: LESLIE ST. UNDERPASSES

NAME OF SPOKESPERSON: KLAUS WEHRENBERG

NAME OF GROUP OR PERSON(S) BEING REPRESENTED (if applicable):

BRIEF SUMMARY OF ISSUE OR PURPOSE OF DELEGATION:

Submission explaining the utility of underpasses in particular underpass C, just south of Newmarket/Aurora town line, and remarks re capitalism

PLEASE COMPLETE THE FOLLOWING:

Have you been in contact with a Town staff or Council member regarding your matter of interest? YES ☑ NO ☐

IF YES, WITH WHOM? JIM TREE DATE: NOV. 10, 16

☑ I acknowledge that the Procedural By-law permits five (5) minutes for Delegations. I might need a few extra minutes and shall make a request to that effect.
7. Adoption of Items Not Requiring Separate Discussion

Items 1 (with the exception of sub-items 3 and 11) and 2 were identified as items not requiring separate discussion.

Moved by Councillor Pirri
Seconded by Councillor Thom

That the following recommendations with respect to the matters listed as “Items Not Requiring Separate Discussion” be adopted as submitted to Council and staff be authorized to take all necessary action required to give effect to same:


That the General Committee meeting report of October 4, 2016, be received and the following recommendations carried by the Committee be approved:

(6) PRCS16-044 – Leslie Street Underpasses Construction

1. That Item 6, Report No. PRCS16-044 – Leslie Street Underpasses Construction, and previous reports and background, be referred to the Trails and Active Transportation Committee for comment on the usefulness of Underpass C and whether it is needed in the Trails Master Plan, and that staff report back.

Carried

Attachment 1 - Report No. PRCS16-044 and previous reports/background
Subject: Leslie Street Underpasses Construction

Prepared by: Jim Tree, Manager of Parks

Department: Parks, Recreation and Cultural Services

Date: October 4, 2016

Recommendation

1. That Report No. PRCS16-044 be received; and

2. That an increase in the Town of Aurora’s 50% contribution toward construction of two (2) underpasses in the amount of $148,336 be approved; and

3. That the budget for Project No. 73177 Regionally Approved Underpasses be increased for a total of $901,960.

Executive Summary

The Region of York Transportation Services Department has completed a Public Tender for the reconstruction and widening of Leslie Street for the section of road between the Town of Aurora northern limit to Wellington Street East.

There are two pedestrian underpasses approved by Council that are to be implemented in this construction project and the Tendered costs for these underpasses exceed the approved budget. Staff are seeking Council approval for an increase in underpass funding.

- Additional 50% funding in the amount of $148,336 will be required based on actual Region of York Tender Prices who indicate that the increase is a reflection of current market value costs.
- Project does not include underpass illumination or access to the surface of Leslie Street. These features may be added at the Town’s expense in the future if deemed necessary.
- Council can decide to not proceed with the underpasses without impacting the Region’s Tender provided this determination is made prior to the end of 2016.
• A construction and operational agreement between the Town and the Region of York is currently under review

Background

The Region of York has scheduled the reconstruction of Leslie Street from the northern limit of the Town of Aurora to Wellington Street commencing in 2017. As part of this reconstruction project, Council had approved additional funding for two (2) pedestrian underpasses at the November 3, 2015 General Committee meeting as follows:

THAT Report No. PR15-034 be received; and

THAT the construction of Underpasses C and D, as outlined in this report, and in accordance with the Town of Aurora Trails Master Plan, be approved; and

THAT funding in the amount of $212,882 be approved; and

THAT 90% of the funds required to construct the underpasses be allocated from the applicable Development Charge Reserve and that the remaining 10% funding be allocated from the applicable Parks and Recreation related reserves; and

THAT staff be directed to enter into an Agreement with The Regional Municipality of York to facilitate the process of construction of the Two (2) underpasses, the associated financial arrangements, and any matters dealing with the future operation and maintenance of these underpasses; and

THAT the Mayor and Town Clerk be authorized to execute the necessary Form of Agreement including any and all documents and ancillary agreements required to give effect to same.

The additional funding of $212,882 was required as a result of an increase in the construction cost estimate of the underpasses provided by the Region of York project consultants.

Analysis

Actual Project Construction Tender Results Reflect Significant Increase in Underpass Costs
The Region of York Transportation Services Department has advised that their Tender process for the reconstruction of Leslie Street has been completed. The actual bid prices have resulted in a significant increase in the cost of the underpasses such that the Town of Aurora share has increased by an additional $148,336. This brings the Aurora 50% share of the two underpasses to a total of $901,960 which exceeds the current approved budget of $753,624.

The Region of York has not offered any additional information or explanation for this increase other than to indicate that the project prices are simply a reflection of the current market prices based on the scope of work specified in the tender documents.

**Scope of Works Does Not Include Lighting or Street Access**

The underpasses have been designed and tendered without the inclusion of illumination components or other security measures as the Region has taken the position that these additions would not be eligible for Regional funding assistance. In addition access to the underpasses from the road surface will not be included in the underpass construction works as this is also viewed by the Region to be outside of the shared costs.

In view of this situation and in the event that illumination and road access to the underpasses is desired by the Town, these features will need to be considered at a future date. It is expected that the underpasses will not be opened until completion of the associated Trails related works estimated to be completed within the next 4 to 5 years. Should it be determined that illumination and road side access to the underpasses is required, staff will provide Council with further information and cost implications in this regard in future reports and Capital Budget submissions.

**Construction and Operating Agreement Currently Undergoing Review**

Pursuant to Council directive associated with PRS 2015-034, Legal Services are currently reviewing the draft Underpass Construction and Operating Agreement. This agreement will set out the roles and responsibilities of the Region of York and the Town during the construction and then the operation of the underpasses. Significant terms in the agreement include the following:

- The Town of Aurora will own and maintain the underpasses to the standards specified for municipal trails in Aurora
- Major structural repairs or expansion will be funded equally by the Town and the Region of York
October 4, 2016

- Further works or improvements associated with illumination or street access to be completed at the sole cost of the Town of Aurora
- The Agreement be automatically renewed unless any one or both parties wishes to terminate the Agreement.

The Town Must Make the Final Decision on Proceeding with the Underpass Construction Prior to the end of 2016

The Region of York has advised that the Tender for the reconstruction of Leslie Street has been awarded to the contractor and work is scheduled to commence in 2017. As such, the Region further advises that the Town of Aurora must commit to funding the 50% share of the Underpass cost prior to the end of 2016.

Should it be determined by Council not to proceed with the underpasses, the item can be removed from the road reconstruction contract without penalty provided this occurs prior to the end of this year.

Advisory Committee Review

This matter has not been circulated to the Trails and Active Transportation Committee (TATC) as the Committee has previously endorsed these underpasses and the Trails Master Plan Policy.

Financial Implications

Currently Capital Project No. has an approved budget amount of $753,624.

The Region of York Tendered price for the Towns 50% share of the construction and contract administration is $901,960 as outlined in the Financial Table below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
<th>Eligible for Cost Sharing</th>
<th>Town of Aurora Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Underpass at Station 10+796</td>
<td>$195,447.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadside Protection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earth Excavation for Pedestrian Tunnel</td>
<td>$37,530.00</td>
<td>$37,530.00</td>
<td>$18,765.00</td>
</tr>
<tr>
<td>Precast Concrete Pedestrian Tunnel, 5000 mm x 3000 mm</td>
<td>$380,721.06</td>
<td>$380,721.06</td>
<td>$190,360.53</td>
</tr>
<tr>
<td>Waterproofing Pedestrian Tunnel</td>
<td>$32,340.00</td>
<td>$32,340.00</td>
<td>$16,170.00</td>
</tr>
<tr>
<td>Granular Bedding for Pedestrian Tunnel</td>
<td>$8,394.10</td>
<td>$8,394.10</td>
<td>$4,197.05</td>
</tr>
</tbody>
</table>
Communications Considerations

No communication considerations at this time.

Link to Strategic Plan

The construction of the underpasses supports the Strategic Plan goal of **Supporting an Exceptional Quality of Life for all** through its accomplishment in satisfying requirements in the following key objectives within this goal statement:

**Encouraging an active and healthy lifestyle** by implementing and regularly updating the Trails Master Plan to improve connectivity.
Alternative(s) to the Recommendation

Option 1: Council can decide not to proceed with one or both of the underpasses however this would not be in keeping with the Trails Master Plan Policy where grade separated crossing of major arterial highways are the preferred method of crossing.

Conclusions

Based on the long term planning goals associated with the Trails Master Plan and the Town’s efforts to continue to develop a high quality trails system, it can be concluded that;

- This investment in trails underpasses will facilitate the safe passage of trail users and result in a significant improvement in accessibility of our trails
- This is the single opportunity available to the Town to complete this project

Attachments

Attachment #1 – Trails and Underpasses C & D Location Map

Previous Reports


Pre-submission Review

Agenda Management Meeting review on September 15, 2016.

Departmental Approval

Allan D. Downey  
Director, Parks, Recreation and Cultural Services

Approved for Agenda

Doug Nadorozny  
Chief Administrative Officer
SUBJECT: Pedestrian Underpasses – Leslie Street and St. John’s Sideroad

FROM: Allan D. Downey, Director of Parks and Recreation Services

DATE: November 3, 2015

RECOMMENDATIONS

THAT Report No. PR15-034 be received; and

THAT the construction of Underpasses A, C and D, as outlined in this report, and in accordance with the Town of Aurora Trails Master Plan, be approved; and

THAT funding in the amount of $1,962,790 be approved; and

THAT 90% of the funds required to construct the underpasses be allocated from the applicable Development Charge Reserve and that the remaining 10% funding be allocated from the applicable Parks and Recreation related reserves; and

THAT staff be directed to enter into an Agreement with the Regional Municipality of York to facilitate the process of construction of the three underpasses, the associated financial arrangements, and any matters dealing with the future operation and maintenance of these underpasses; and

THAT the Mayor and Town Clerk be authorized to execute the necessary Form of Agreement including any and all documents and ancillary agreements required to give effect to same.

PURPOSE OF THE REPORT

To obtain Council approval to construct three underpass structures as recommended in the Trails Master Plan.

BACKGROUND

The Trails Master Plan was approved by Council on October 25, 2011 and within this document, grade separated trail crossings are identified in a number of locations within the municipality.
Grade separated trail crossings are the preferred method of crossing busy arterial roads, rail corridors and other pedestrian and motorized traffic interfaces in that they facilitate a much safer means of crossing roads or barriers and add significantly to both the unhindered continuity of an off-road trail and the users overall experience of a connected municipal trail system.

This report specifically deals with three individual underpass structures being contemplated for construction on Leslie Street. These underpasses have been the subject of multiple reports and discussions at both Council and the Trails and Active Transportation Committee (TATC).

For the purposes of this report the three Underpasses with be referenced as Underpasses A, C and D.

UNDERPASSES C & D

At its August 13, 2013 meeting, Council approved Report PR13-038 St John`s Sideroad and Leslie Street Trail System Underpasses, for the construction of two Trail Underpasses, in partnership with the Region of York, to facilitate the trails contemplated in the 2C Development lands in the locations shown on the attached plan.

These underpasses have been included in the Region of York Transportation Departments project design for the reconstruction and widening of Leslie Street scheduled to commence in 2017.

Council approved Underpasses C and D on the basis of a 50% cost-sharing partnership arrangement with the Region of York through the Municipal Partnership Program for Cycling and Pedestrian related infrastructure projects.

The original cost estimates for the two approved underpasses were provided by the Region of York Transportation Department in their June 12, 2013 report to the Regional Transportation Services Committee as follows:

<table>
<thead>
<tr>
<th>Underpass</th>
<th>Region of York 50%</th>
<th>Town of Aurora 50%</th>
<th>TOTAL PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>$200,000</td>
<td>$200,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>D</td>
<td>$275,000</td>
<td>$275,000</td>
<td>$550,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$950,000</td>
</tr>
</tbody>
</table>

Region of York Transportation Services staff have recently updated their estimate for the two underpasses as follows:
Staff requested a detailed explanation from the Region as to what has transpired since 2013 to inflate the original cost estimate by $494,912.00. The Region responded to our request and provided the following information from the project engineering consultant:

**Culvert at STA 10+796:** The original estimate was $400,000 and the revised estimate is $509,000. The increase in cost is due to addition of the 750mm Concrete Pressure water main drain valve & chamber and additional water main reinstallation that will be required now. The requirements of the water main works were not anticipated at the time when the original cost estimate was produced and it came to our attention during the detail design phase.

**Culvert at STA 12+400:** The original estimate was $550,000 and the revised estimate is $781,000. The increase in cost is due to increased length of the underpass. Originally it was anticipated that the culvert will be constructed perpendicular to the road. Due to the site constraints and conflict with the existing drainage culvert, the underpass structure is designed parallel to the drainage culvert that is skewed and consequently increased the length of the culvert needed. In addition, the increased in the length added additional excavation and backfill costs.

In addition to the aforementioned cost increase, the Region has now included a project administration cost of 12%. In summary, the revised Town of Aurora 50% share of the two previously approved underpasses C and D is now $722,455.00.

**UNDERPASS A**
To further determine more accurate costing of Underpass A, Council, at its November 12, 2013 meeting, adopted the recommendation from the October 18, 2013 Trails and Active Transportation Committee (TATC) meeting as follows:
THAT Council adopt the following Trails and Active Transportation Committee recommendation from the meeting of October 18, 2013:

2. Memorandum from the Manager of Parks
Re: Leslie Street Underpass A

THAT staff be directed to develop a terms of reference and retain an engineering firm to conduct a preliminary design and cost analysis for the underpass in consultation with the Region of York staff provided that the cost of the design is to a maximum of $50,000.00.

COMMENTS

Underpass A is perhaps the most significant grade separated crossing in the entire 2C Development lands in that it connects all of the off-road trails in 2C on both the east and west side of Leslie Street as well as to the future Wildlife Park Trails and to the Town of Newmarket Trail system. In addition, Underpass A works in close companionship with the proposed Overpass B which is being constructed by the Region of York, at no cost to the Town, in conjunction with the upcoming reconstruction of St. John’s Sideroad.

Both St. John’s Sideroad and Leslie Street will be major arterial four lane roads when reconstructed in 2017 and the likelihood of Underpass A being introduced on Leslie Street at a future date is highly unlikely due to the many logistical constructions issues and enormous associated costs. This is the only opportunity that Underpass A could be implemented.

CONNECTIVITY OF THE 2C TRAIL SYSTEM

The 2C Development is somewhat unique in that 2C was planned and develop in the broader context with the involvement of the majority of property owners in the overall functionality of the roads, trails and parks in the entire development block. This presented an opportunity to provide a superior network of trails that would serve as the best example to date of a well planned and executed system of trails that would provide excellent recreational, utilitarian and non-motorized transportation corridors all aimed at making 2C a more walkable community. These attributes are all identified in the Council approved policies contained in the Trails Master Plan.

On the surface, the proposed trails underpasses that were identified in the Trails Master Plan and in particular the 2C area, may appear as somewhat extravagant luxuries that provide a limited benefit to the overall community. The fact remains that the trail system in Aurora is highly popular with our residents such that it was revealed in the public survey conducted during the formulation of the Trails Master Plan, that the Town’s trail system was the single most popular recreational activity in Aurora and that the public supported further investment in expanding and improving the system.
It is important to note that development of the existing trail system in Aurora has taken more than 40 years to implement and implementation and much of the system was developed incrementally when land became available and was conveyed to the municipality through the private land development industry bit by bit. In the case of 2C much of the land required for the trail system has already been transferred to the municipality or will be transferred through the orderly process of the overall 2C development area in accordance with all of the Town policies and plans.

We have attached a map which provides clarity on the Trails proposed within 2C and the status on the ownership of these lands. With this information it is clear that all of the lands required to facilitate the trails and underpasses in 2C either are in place or, as with the other trails in Aurora, will be available in the fullness of time.

An alternative to Underpass A was included in the preliminary design exercise. The alternative includes ramps that traverse the slopes on both the east and west side of the Leslie Street road embankments.

These lengthy ramps would extend from the trail in the valley floor to the intersection of St. John’s Sideroad and Leslie Street and be benched into the road embankments; however, on the east side of Leslie Street the ramps cannot be constructed entirely within the Regional road right-of-way due to the severity of the grades in this particular location. As such, the Town would need to acquire a portion of the lands from the neighbouring property owner at some point in the future in order to construct the ramps. The estimated cost to construct these ramps is $375,000.00 and the Region of York has committed to providing $50,000.00 in funding assistance toward the at-grade crossing and ramps. Regional staff has indicated that a further contribution at the request of the Town may require a Regional Council approval.

Unlike Underpasses C and D, Underpass A was not supported by the Region of York for inclusion in the Municipal Partnership funding program due to the fact that there is no requirement to replace or alter existing culverts or infrastructure in this location and as such it is not necessary for the Region to excavate through the entire width of the road base.

Following direction from Council at its November 12, 2013 meeting, staff completed the Terms of Reference and retained an engineering consulting firm to complete a preliminary design and cost estimate for Underpass A. This work has been ongoing since 2013 and has just recently been completed. The preliminary design has taken into consideration all aspects of the underpass including the structural elements and any complications or conflicts with existing services that will be encountered should the project be implemented.

As a result, it has been determined that the project is feasible; however, it will be necessary to incorporate a number of engineering solutions to mitigate conflicts with existing water and sewer mains in the location of the underpass.
The Region of York Transportation Services staff have reviewed and approved, in principal, the Underpass A preliminary design and are prepared to include this project in the Leslie Street reconstruction project tender should Council support funding this underpass. The estimated cost of Underpass A is $1,749,907.50.

Upon assumption of the underpasses, the Town will be required to maintain the trail surfaces and the illumination components within the structures, although these costs have not been identified at this time. It is expected that the costs will be nominal and included in annual Parks and Recreation operating budgets. The Region of York would continue to own and maintain the major structural components.

LINK TO STRATEGIC PLAN

The construction of the underpasses supports the Strategic Plan goal of Supporting an Exceptional Quality of Life for all through its accomplishment in satisfying requirements in the following key objectives within this goal statement:

Encouraging an active and healthy lifestyle by implementing and regularly updating the Trails Master Plan to improve connectivity.

ALTERNATIVE(S) TO THE RECOMMENDATIONS

1. To defer the construction of Underpass A and direct staff to request 100% funding from The Region of York for the optional at-grade crossing and ramp system to be fully implemented at a future date when sufficient lands required to build the ramps on the east side of Leslie Street have been secured through the land development process.
2. To defer construction on one or both Underpass C and D and reallocate funding for these underpasses to Underpass A.
3. To defer construction of Underpass A and the at-grade crossing at this time.
4. Further options as required.

FINANCIAL IMPLICATIONS

Currently Underpasses C and D are partially funded and approved in Capital Project Account; however, as a result of the revised cost estimate provided by the Region of York Transportation Department, an additional Aurora contribution of $212,882.00 will be required in order to match the Region’s 50% contribution to these underpasses.
Currently Underpass A is unfunded and not included in the 10-year Capital Forecast as it was removed following the initial Council directive to not construct this underpass.

### UNDERPASS A

<table>
<thead>
<tr>
<th>UNDERPASS</th>
<th>TOTAL COST</th>
<th>AURORA SHARE 100 %</th>
<th>APPROVED FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$1,749,907.50</td>
<td>$1,749,907.50</td>
<td>$0</td>
</tr>
</tbody>
</table>

### Summary of funding requirements

| UNDERPASSES C and D | $212,882.00 |
| UNDERPASSES A       | $1,749,907.50 |

**TOTAL**  $1,962,789.50

This project is eligible for 90% development charges funding as a growth related recreation infrastructure as follows:

- DC 90%  $1,766,510.50
- Parks & Recreation Reserves 10%  $196,279.00

### CONCLUSIONS

That Council approve Underpasses A, C and D as outlined in this report and that the projects be funded through the Development Charges and Parks and Recreation Reserve accounts.
November 3, 2015

Staff be directed to enter an Agreement with the Regional Municipality of York for the purposes of facilitating the underpass construction projects in conjunction with the Leslie Street reconstruction project in 2017.

PREVIOUS REPORTS

PR13-038– Leslie Street Underpasses August 13, 2013

ATTACHMENTS

Attachment #1 – Staff Report No. PR13-038 St John’s Sideroad and Leslie Street Trail System Underpasses – August 13, 2013
Attachment #2 – Proposed Trails Map for 2C Development Area

PRE-SUBMISSION REVIEW

Executive Leadership Team Meeting, Wednesday, October 21, 2015.

Prepared by: Jim Tree, Parks Manager- Ext. 3222

Allan D. Downey
Director of Parks and Recreation

Patrick Moyle
Interim Chief Administrative Officer
SUBJECT: St John’s Sideroad and Leslie Street Trail System Underpasses

FROM: Allan D. Downey, Director of Parks and Recreation Services

DATE: August 13, 2013

RECOMMENDATIONS

THAT report PR13-038 be received for information; and

THAT the two (2) underpasses noted in Attachment #1 of this report as Underpass “C” and “D” be approved as recommended in report PR13-035; and

THAT Council provide direction with regards to Underpass “A” and that the Region of York be requested to prepare a design specification for this underpass and include the underpass in the Regional Tender for the reconstruction of Leslie Street if funding is approved; and

THAT the underpass shown at the Marsh Creek Crossing noted in Attachment #1 of this report as Underpass “E” not be constructed.

PURPOSE OF THE REPORT

To provide Council with additional information on the matter of Grade Separated Trail Underpasses as directed by Council at the July 16, 2013 Council meeting.

BACKGROUND

In report PR13-035, which was presented at the July 16, 2013 Council meeting, staff recommended that Council approve the construction of two Grade Separated Underpasses to facilitate future trail development in accordance with Trails Master Plan.

These underpasses had received Regional approval and the Region has agreed in principal to partner with the Town of Aurora and share in 50% of the cost to build this infrastructure, subject to final budget approval.
In addition to these underpasses there was reference to two additional underpasses. One underpass is in the vicinity of St John’s Sideroad and Leslie Street while the other is in the vicinity of St John’s and Mavrinac Boulevard.

Leslie Street and St. John’s Sideroad Underpass (Underpass “A”)
This crossing had been requested by the Town and is included in the Trails Master Plan at a location 130 meters south of St John’s Sideroad (see attached Fig.1). This crossing is not supported by the Region of York as noted in the below excerpt from the Region of York Transportation Services Committee June 12, 2013 Report of the Commissioner of Transportation and Community Planning:

The proposed active transportation underpass trail crossing on Leslie Street, south of St. John’s Sideroad would require a dedicated independent underpass as the existing drainage culvert does not require replacement
The existing 55 metre long culvert on Leslie Street south of St. John’s Sideroad is in good condition and requires only a 4 metre extension to accommodate the new width of Leslie Street. As such, an active transportation underpass trail crossing at this location would require a dedicated independent underpass. The cost to install an underpass at this location is approximately $1,200,000 as previously indicated in the February 17, 2011 Council Report.

Given the close proximity (130 metres) of the proposed trail to the existing signalized intersection of Leslie Street and St. John’s Sideroad; that the Town of Aurora’s Draft Trail Route Network and Aurora 2c Secondary plan both include a trail connection from the proposed culvert to the traffic control signals at St. John’s Sideroad; and that the ramp required to get from water level to road level is approximately 120m in length, a standalone culvert is not a cost effective solution and Region staff would not recommend any cost sharing under the Municipal Pedestrian and Cycling Partnership Policy for this project.

In view of the Region’s position on this underpass, the Town of Aurora would be required to fund the project 100%. As indicated by the Region, the cost for this crossing is currently estimated at $1,200,000.00.

The Region has indicated that their Tendering Policy will not permit an unfunded project to be included in a Regional Tender and, as such, it will not be possible to carry this item in the Region’s Tender unless the Town of Aurora commits to funding the underpass project.

As an alternative to the underpass, the Region has committed to constructing the walkways and ramps required to facilitate pedestrians and cyclist access from the trail, up the slopes to the controlled intersection for the safe crossing of Leslie Street.
St. John’s Sideroad and Mavrinac Boulevard Underpass (Underpass “E”)
This crossing is not identified as a Grade Separated Underpass in the Trails Master Plan; rather, it is shown as an at-grade crossing. The request for a Grade Separated Crossing was recommended by the former Trails Sub-Committee following final approval of the Trails Master Plan.

In response to this request, the Region of York Transportation Department has recently provided staff with some technical information and preliminary costing for this underpass.

COMMENTS

For clarity purposes Attachment #1 being the Trails Master Plan mapping has identified all of the relevant crossings being contemplated at this time which involve both the Town of Aurora and the Region of York. The following table describes each of the crossings and its current status in terms of design and funding:

<table>
<thead>
<tr>
<th>UNDERPASS MAP LOCATION</th>
<th>REGION OF YORK POSITION</th>
<th>OVERALL COST &amp; COST SHARING</th>
<th>TOWN OF AURORA COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Region of York does not support Underpass “A”</td>
<td>$1,200,000.00</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>B</td>
<td>Region supports Underpass “B” with clear span bridge</td>
<td>Unknown cost Region funded 100%</td>
<td>$0</td>
</tr>
<tr>
<td>C</td>
<td>Region supports Underpass “C”</td>
<td>$550,000 Region &amp; Town to share 50%</td>
<td>$275,000</td>
</tr>
<tr>
<td>D</td>
<td>Region supports Underpass “D”</td>
<td>$400,000 Region and Town to share 50%</td>
<td>$200,000</td>
</tr>
<tr>
<td>E</td>
<td>Region will permit the revision from an at grade crossing as per Trails Master Plan to Underpass</td>
<td>$1,300,000 current estimate, Region has not committed to cost sharing</td>
<td>$1,300,000 (estimate)</td>
</tr>
</tbody>
</table>

St. John’s Sideroad and Mavrinac Boulevard Underpass
The underpass labelled “E” on the attached Trails Map was specified as an at-grade crossing at a controlled intersection. The Region has indicated that the addition of an underpass at this location presents a number of complications that will impact on the
Marsh Creek water course crossing that is included in the proposed reconstruction of St. John’s Sideroad.

The Region indicates that in the event the underpass is approved, it would be a standalone crossing moved further west of the water course and as such it will be necessary to raise the entire road bed considerably in this stretch of road.

As a result the Marsh Creek water course crossing would need to be increased in size to accommodate a major storm event. This will add significantly to the project costs.

The road width will need to be widened and additional lands may need to be obtained from the land owners affected. At this time it is not entirely clear in terms of the quantity of additional land needs; however, there is sufficient information to suggest that the road will need to be widened to accommodate an underpass.

Council will recall the delegate who represented Mattamy Homes at the July 16, 2013 Council Meeting where the delegate voiced concerns regarding an underpass in the proposed location. Mattamy Homes has since forwarded correspondence to staff outlining their concerns and staff has included this correspondence for information as Attachment #2.

In view of the preceding information and the fact that this underpass was not included or approved in the Trails Master Plan staff do not support constructing this underpass.

LINK TO STRATEGIC PLAN

The construction of the Leslie Street underpasses supports the Strategic Plan goal of Supporting an Exceptional Quality of Life for all through its accomplishment in satisfying requirements in the following key objectives within this goal statement:

Encouraging an active and healthy lifestyle by implementing and regularly updating the Trails Master Plan to improve connectivity.

ALTERNATIVE(S) TO THE RECOMMENDATIONS

1. Option 1 abandon the planned underpasses and request the Region of York to provide at grade trail crossings at the appropriate controlled intersections.
2. Provide funding in the amount of $1,200,000.00 to complete Underpass “A” as indicated in the Trails Master Plan.
3. Further Options as required.
FINANCIAL IMPLICATIONS

As outlined in staff report PR13-035, the Region has suggested that the Town of Aurora share of the cost for the two Underpasses “C” & “D” will be 50% or $475,000.00. The remaining $475,000.00 will be in the form of a Regional Grant under their Pedestrian and Cycling Municipal Partnership Program.

In the recently completed 10 Year Capital Investment Plan Capital Project 73177 identifies three underpasses on Leslie Street to be constructed in 2015 at a cost of $900,000.00 and two underpasses on St. John’s Sideroad in 2016 at a cost of $600,000.00 which would bring the Town’s total estimated expenditure to $1,500,000.00.

The revised cost estimate for the recommended underpasses that are recommended in the Trails Master Plan is now $1,675,000.00.

CONCLUSIONS

That Council approve the underpasses as recommended in this report and formally endorse an application to the Region of York under the Regional Pedestrian and Cycling Municipal Partnership Program Grant for 50% funding of the two (2) grade separated underpass crossings identified as crossings C & D. Also that Council provide direction regarding Underpass “A” at an estimated cost to the Town of Aurora of $1,200,000 and that the Region of York be requested to design the Underpass and include this item in the Leslie Street road reconstruction project if funding is approved.

PREVIOUS REPORTS

IES11-055 November 8, 2011 Leslie Street and St. John’s Sideroad Pedestrian Trail Crossings
PR13-035 July 16, 2013 Leslie Street Underpasses

ATTACHMENTS

Attachment #1 - Trails Master Plan section Map showing proposed underpasses
Attachment #2 - Correspondence for Mattamy Homes
Attachment #3 - Fig. 1 Aerial photograph showing location of Underpass “A” and Fig.2 Aerial photograph showing location of Underpass “E”
PRE-SUBMISSION REVIEW

Executive Leadership Team Meeting, Thursday, August 1, 2013.

Prepared by: Jim Tree, Parks Manager- Ext. 3222

Allan D. Downey
Director of Parks & Recreation Services

Neil Garbe
Chief Administrative Officer
SUBJECT: Region of York Municipal Partnership Grant Application and Approval of Two Grade-Separated Underpasses

FROM: Allan D. Downey, Director of Parks and Recreation Services

DATE: July 16, 2013

RECOMMENDATIONS

THAT report PR13-035 be received; and

THAT Council formally endorse an application to the Region of York for 50% funding of two (2) grade-separated underpass crossings of Leslie Street; and

THAT Council approve, in principle, a partnership with the Region of York in constructing these underpasses in conjunction with the re-construction and widening of Leslie Street currently scheduled for 2015 at an estimated cost of $475,000.00.

PURPOSE OF THE REPORT

To request Council approval for the construction of two grade-separated crossings of Leslie Street, as specified in the Trails Master Plan, and for authority to apply for a Municipal Partnership Grant from the Region of York for 50% of the costs of the underpasses.

BACKGROUND

The issue of barrier free trail crossings of Leslie Street and St. John’s Sideroad has been an ongoing matter since plans were announced by the Region of York’s Transportation Department that both Leslie Street and St. John’s Sideroad were in the planning stages for re-construction.

This was of interest to the former Trails Sub-Committee and the current Trails and Active Transportation Advisory Committee (TATC) as grade-separated, barrier-free road crossings are supported by the Trails Master Plan. A chronological background outlining all aspects on the history of this matter was presented to Council on November 8, 2011 via report IES11-055 where Council subsequently endorsed the following
recommendations:

THAT Council support Option 2- Underpasses just below grade as a reasonable solution to pedestrian access; and

THAT Council approve the principle of a 50/50 funding arrangement with York Region based on an estimate of $1.2M per underpass and subject to Regional approval; and

THAT Council approve a 2012 budget of $50,000 per crossing to accommodate 50 percent of the design costs to be completed and funded through York Region.

On May 11, 2012 a letter was forwarded to the Regional Clerk from our Director of Customer and Legislative Services formally notifying the Region of the above noted recommendations. In response to this request staff met with senior staff from the Region’s Traffic Management Branch to discuss this matter on April 2, 2013.

At the April 2, 2013 meeting, Region staff indicated that they had completed further review of the requested trail underpasses and had determined that the costs to provide these crossings is lower than the costs previously estimated. As such, the Region advised that a report would be submitted to the Regional Transportation Services Committee recommending proceeding with two underpasses on Leslie Street in the locations specified on the attached location map.

A Regional Committee report entitled ACTIVE TRANSPORTATION UNDERPASS TRAIL CROSSINGS OF LESLIE STREET AND ST. JOHN’S SIDE ROAD (attached) was tabled at the June 12, 2013 Region Transportation Service Committee meeting and received unanimous endorsement by the Transportation Committee.

COMMENTS

In addition to the above noted underpasses, the Town had requested that the project include an additional underpass at the intersection of Leslie Street and St. John’s Sideroad. As indicated in the Regional Transportation report, this underpass is not supported by the Region as the existing infrastructure in this location does not require upgrading to facilitate the road reconstruction project. As such, the costs to construct this underpass would be approximately $1,200,000.00 and far too expensive to warrant this expenditure in the opinion of the Region.

Staff would support the Region’s position in this regard as it is possible to achieve a functional trail system by utilizing the proposed underpasses which will be connected to the future trail grid proposed for the 2C development area. The Region will also provide access to the trails in this location with an at-grade crossing at the signalized intersection of St. John’s Sideroad and Leslie Street with approach ramps connecting to the trails in the valley at no cost to the Town.
It has also been determined by the Region that the grade-separated crossing recommended in the Trails Master Plan just west of Leslie Street on St. John's Sideroad will not be required as it will be necessary for the Region to construct a bridge in this location and, as such, the Region has committed to ensuring that the bridge structure is of sufficient length and will include the necessary trail surfacing to accommodate the trail below the bridge with no additional cost to the Town.

In addition to these two underpasses, staff are currently working with the Region of York Transportation Project Manager on the details associated with a proposed underpass further west on St. John’s Sideroad in the vicinity of Mavrinac Avenue and Marsh Creek. This is also shown as a proposed trail crossing in the Trails Master Plan; however, preliminary cost estimates indicate that the crossing would be in the area of $3,200,000.00.

At this time staff is not recommending to advance further discussions with the Region on this crossing until all aspects of the project can be reviewed and presented formally to TATC at an upcoming meeting for their input and recommendations.

LINK TO STRATEGIC PLAN

The construction of the Leslie Street underpasses supports the Strategic Plan goal of Supporting an Exceptional Quality of Life for all through its accomplishment in satisfying requirements in the following key objectives within this goal statement:

Encouraging an active and healthy lifestyle by implementing and regularly updating the Trails Master Plan to improve connectivity.

ALTERNATIVE(S) TO THE RECOMMENDATIONS

1. Abandon the planned underpasses and request the Region of York to provide at grade trail crossings at the appropriate controlled intersection.
2. Further Options as required.

FINANCIAL IMPLICATIONS

Funding for the two underpasses has been identified in previous reports to Council and was based on preliminary estimates of $1,200,00.00 per underpass. It has now been determined by the Region, through a more detailed review of all relevant information that the costs for the two proposed underpasses will be in the range of $950,000.00 each.
July 16, 2013

The Region has suggested that the Town of Aurora share of the cost will be 50% or $475,000.00. The remaining $475,000.00 will be in the form of a Regional Grant under their Pedestrian and Cycling Municipal Partnership Program.

In the recently completed 10 Year Capital Investment Plan Capital Project 73177 identifies three underpasses on Leslie Street to be constructed in 2015 at a cost of $900,000.00 and two underpasses on St. Johns Sideroad in 2016 at a cost of $600,000.00 bringing the Town’s total estimated expenditure to $1,500,000.00. Funding for the underpasses is planned to be from Development Charges, with 10% funded from the Growth & New Capital reserve.

In view of the time guidelines associated with the Regional Pedestrian and Cycling Municipal Partnership Program Grant, staff has submitted a preliminary grant application as a place holder until Council has provided their position on the matter. In the event Council elects to defer support for the project, the Grant will be withdrawn.

**Underpass Trail Crossing Cost Summary**

<table>
<thead>
<tr>
<th>Crossing</th>
<th>Region1</th>
<th>Aurora2</th>
<th>Total</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leslie Street – 260 metres north of State Farm Way</td>
<td>$200,000</td>
<td>$200,000</td>
<td>$400,000</td>
<td>Proceed with twin box culvert tunnel for future trail connection by Aurora</td>
</tr>
<tr>
<td>Leslie Street – 380 metres north of St. John’s Sideroad</td>
<td>275,000</td>
<td>275,000</td>
<td>550,000</td>
<td>Proceed with twin tunnel for future trail connection by Aurora</td>
</tr>
<tr>
<td>St. John’s Sideroad – 325 metres west of Leslie Street</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Proceed with modified bridge design for future trail connection by Aurora</td>
</tr>
<tr>
<td>Leslie Street – 130 metres south of St. John’s Sideroad</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Not recommended</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$475,000</strong></td>
<td><strong>$475,000</strong></td>
<td><strong>$950,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 Funded through Municipal Partnership Program
2 Not eligible for additional Partnership Program Funds
CONCLUSIONS

That Council formally endorse an application to the Region of York under the Regional Pedestrian and Cycling Municipal Partnership Program Grant for 50% funding of two (2) grade separated underpass crossings of Leslie Street and approve in principal, a partnership with the Region of York in constructing these underpasses in conjunction with the reconstruction and widening of Leslie Street currently scheduled for 2015 at an estimated cost to the Town of Aurora of $475,000.00 being 50% of the overall project cost.

PREVIOUS REPORTS

IES11-055 November 8, 2011 Leslie Street and St. John’s Sideroad Pedestrian Trail Crossings

ATTACHMENTS

Attachment #1 - Regional Committee report entitled ACTIVE TRANSPORTATION UNDERPASS TRAIL CROSSINGS OF LESLIE STREET AND ST. JOHN’S SIDEROAD

PRE-SUBMISSION REVIEW

Executive Leadership Team Meeting, Wednesday, July 3, 2013.

Prepared by: Jim Tree, Parks Manager- Ext.3222

Allan D. Downey
Director of Parks & Recreation Services

Neil Garbe
Chief Administrative Officer
1. RECOMMENDATIONS

It is recommended that:

1. Council approve the principle of a 50/50 cost sharing arrangement, with the Town of Aurora, for the incremental cost of adding provisions for active transportation trail crossings at the following locations:
   a) Leslie Street – 260 metres north of State Farm Way
   b) Leslie Street – 380 metres north of St. John’s Sideroad
   c) St. John’s Sideroad – 325 metres west of Leslie Street

2. Staff include an additional $475,000 of funding for the Pedestrian and Cycling Municipal Partnership Program for consideration as part of the 2014 capital budget to fund the Region’s share of the incremental costs of adding provisions for the three underpasses.

2. PURPOSE

This report provides information and recommendations to Council related to the Town of Aurora’s request for a 50/50 funding arrangement with York Region for the design and construction of active transportation trail crossings of Leslie Street in the vicinity of St. John’s Sideroad and of St. John’s Sideroad, west of Leslie Street.

3. BACKGROUND

The Town of Aurora has requested that York Region partially fund, design and construct active transportation underpass trail crossings as part of the Leslie Street and St. John’s Sideroad projects

In August 2009, the Town of Aurora submitted a letter requesting that York Region consider including pedestrian underpasses in the ongoing Class Environmental Assessment (EA) for Leslie Street and the ongoing detailed design for St. John’s Sideroad.
An active transportation underpass trail crossing is typically a culvert or bridge structure constructed below the elevation of the pavement. The structure facilitates pedestrian and cyclist movements from one side of the right-of-way to the other without having to walk across the travelled portion of the roadway.

Four underpass trails were requested by the Town of Aurora located as follows:
- Leslie Street approximately 260 m north of State Farm Way
- Leslie Street approximately 130 m south of St. John’s Sideroad
- Leslie Street approximately 380 m north of St. John’s Sideroad
- St. John’s Sideroad approximately 325 m west of Leslie Street

A map illustrating the location of each crossing is appended to this report (see Attachment 1).

**York Region has two infrastructure projects underway in the vicinity of Leslie Street and St. John’s Sideroad**

The detailed design of Leslie Street between Wellington Street and Mulock Drive was initiated in October 2011 and the design has progressed to the 60% design level. The construction of this segment of Leslie Street is scheduled for 2015 in the current 10 Year Roads Construction Program.

The detailed design of St. John’s Sideroad between Bayview Avenue and Highway 404 was initiated in December 2012 and the design is at the 30% design level. The construction of this segment of St. John’s Sideroad is scheduled for 2016 in the current 10 Year Roads Construction Program.

**Consultation with Town of Aurora staff regarding the proposed active transportation underpass trail crossings has been ongoing**

Discussions with Town of Aurora staff have been ongoing since September 2009 with formal responses submitted to Town of Aurora staff on June 28, 2010 and August 30, 2010. The response letters suggested a number of potential underpass trail crossing options, identified other elements that should be considered when determining the appropriate underpass concept, and the approximate construction cost of each underpass. This information is discussed in greater detail in the following sections.

At their meeting on September 13, 2010, the Council of the Town of Aurora adopted General Committee Report No. IES10-043 recommending construction of the underpasses.

Senior Regional staff attended the September 13, 2010, meeting of the Council of the Town of Aurora. During this meeting staff agreed to defer the completion of the Leslie Street Class EA Study until York Region’s Transportation Services Committee had an opportunity to consider the Town of Aurora’s request.
Council approved at-grade crossings as the preferred alternative

On February 17, 2011, Council adopted Transportation Services Committee, Clause 5 of Report No. 2, recommending the approval of at-grade pedestrian/cyclist crossings at Leslie Street and St. John’s Sideroad as the preferred alternative for accommodating pedestrian and cyclist movements across the Regional corridors in this area.

Town of Aurora requested reconsideration of the Council approved recommendation if a 50/50 funding arrangement could be reached

Transportation Services Committee, at its meeting on June 13, 2012, received and referred to staff, a May 11, 2012 communication from the Town of Aurora referencing the following resolutions:

- THAT staff investigate funding alternatives and partnerships THAT Council receive Report I EST 1-055; and
- THAT Council support Option 2 - Underpasses just below grade as a reasonable solution to pedestrian access; and
- THAT Council approve the principle of a 50/50 funding arrangement with York Region based on an estimate of $1.2M per underpass and subject to Regional approval; and
- THAT Council approve a 2012 budget of $50,000 per crossing to accommodate 50 percent of the design costs to be completed and funded through York Region; and

The May 11, 2012 communication from the Town of Aurora is appended to this report (see Attachment 2).

This report is in response to the June 13, 2012 Transportation Services Committee referral of this communication from Town of Aurora to staff.

4. ANALYSIS AND OPTIONS

Grade separated crossings of Regional roads provide operational benefits to trail users

Active transportation underpass trail crossings provide improvements for both motorists and pedestrians/cyclists. Pedestrians and cyclists are able to cross the Regional right of way without delay or conflict with motor vehicles and are not required to ascend and descend the lengthy connecting ramps required to get them from the valley floor to road level.

Motorists will experience less delay with the elimination of mid-block at-grade crossings and reduced conflicts as the number of pedestrians/cyclists using the existing intersections will be reduced. These trails will provide a safe and efficient connection
between a residential development of approximately 8000 people and employment lands with approximately 5000 potential jobs.

Active transportation underpass trail crossings of Regional roads can be provided through existing or proposed bridge structures, dedicated independent underpasses or by adding an active transportation culvert adjacent to a proposed drainage culvert.

Generally speaking, there are three options for providing active transportation underpass trail crossings. Boardwalks can be installed under existing bridge structures, as was done most recently at the Tom Taylor trail crossing of Mulock Drive (Figure 1).

Dedicated, independent underpasses (Figure 2) are also possible but are very costly to construct as a stand-alone project. The third option is to provide twinned culverts when an existing watercourse crossing is being replaced to provide an active transportation facility adjacent to the water crossing (Figure 3). The incremental cost of providing an additional culvert is substantially less than an independent culvert.
The previous cost estimates provided to the Town of Aurora which helped to support the recommendations of at-grade crossings as the preferred alternative for accommodating pedestrians were based on an estimated cost of approximately $1,200,000 each for a dedicated independent underpass trail crossing. Further detail design work has revealed that the underpass trail crossings can be constructed for considerably less by using twinned culvert and/or modified bridge structure designs where existing culverts are being replaced.

**The proposed active transportation underpass trail crossing on St. John’s Sideroad west of Leslie Street can be accommodated by modifying the proposed bridge structure at minimal costs**

As part of the detailed design for St. John’s Sideroad it has been determined that the existing culvert, approximately 325 metres west of Leslie Street, will be replaced with a bridge structure in order to accommodate Lake Simcoe Regional Conservation Authority (LSRCA) requirements.

As part of the ongoing detailed design and construction process, York Region staff will ensure that the new structure is positioned to provide adequate head room for a future boardwalk (similar to Mulock Drive) to be installed above the high water line. The design will include minor adjustments that will help to facilitate the installation of the boardwalk in the future.

**The proposed active transportation underpass trail crossing on Leslie Street, south of St. John’s Sideroad would require a dedicated independent underpass as the existing drainage culvert does not require replacement**

The existing 55 metre long culvert on Leslie Street south of St. John’s Sideroad is in good condition and requires only a 4 metre extension to accommodate the new width of Leslie Street. As such, an active transportation underpass trail crossing at this location would require a dedicated independent underpass. The cost to install an underpass at this location is approximately $1,200,000 as previously indicated in the February 17, 2011 Council Report.

Given the close proximity (130 metres) of the proposed trail to the existing signalized intersection of Leslie Street and St. John’s Sideroad; that the Town of Aurora’s Draft Trail Route Network and Aurora 2c Secondary plan both include a trail connection from the proposed culvert to the traffic control signals at St. John’s Sideroad; and that the ramp required to get from water level to road level is approximately 120m in length, a stand alone culvert is not a cost effective solution and Region staff would not recommend any cost sharing under the Municipal Pedestrian and Cycling Partnership Policy for this project.
The proposed active transportation underpass trail crossing on Leslie Street, north of St. John’s Sideroad and on Leslie Street north of State Farm Way can be accommodated during the replacement of the existing drainage culverts for a similar cost of providing new at grade crossings.

Active transportation underpass trail crossing on Leslie Street, approximately 380 metres north of St. John’s Sideroad and 260 metres north of State Farm Way can be accommodated during the replacement of the existing culvert crossings. Our detailed design consultant has prepared cost estimates to determine the incremental costs of adding an additional culvert to accommodate the active transportation trail. The total estimated cost for both crossings is $950,000. If the culverts are not installed during this project and it is determined in the future that these crossings are required, the cost of installing dedicated independent underpasses at these locations will be approximately $2,200,000.

As previously reported in the February 17, 2011 Council Report, the Regional costs for at grade crossings was estimated to be $300,000. Not included in this estimate was the Town of Aurora’s cost to bring the trail from the elevation of the water to the elevation of the road, a change of as much as 9m, which will require ramps up to 180 metres long. The estimated cost to the Town of Aurora for these ramps is $350,000.

Link to key Council-approved plans

The 2011 to 2015 Strategic Plan identifies continuing to deliver and sustain critical infrastructure as a Strategic Priority Area. One of the indicators of success for this objective is to increase non-automotive travel across the Region. The design and construction of the proposed active transportation underpasses will link a key residential development with commercial and employment lands in the Town of Aurora. These linkages are critical to promoting walking and cycling as viable transportation options for the community.

5. FINANCIAL IMPLICATIONS

The total incremental cost to provide two active transportation underpass trail crossings on Leslie Street and provisions for a future active transportation underpass on St. John’s Sideroad is $950,000.

The incremental cost for an additional culvert on Leslie Street north of State Farm Way is $400,000. The incremental cost for an additional culvert on Leslie Street north of St. John’s Sideroad is $550,000. Assuming a 50/50 cost sharing agreement, the Region and Town of Aurora would each pay $475,000 to construct both active transportation underpasses. Table 1 summarizes the design and incremental construction cost estimates for each crossing. The Municipal Pedestrian and Cycling Partnership Program is funded 90 per cent from development charges and 10 per cent from the tax levy.
Table 1
Underpass Trail Crossing Cost Summary

<table>
<thead>
<tr>
<th>Crossing</th>
<th>Incremental Construction Cost</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leslie Street – 260 metres north of State</td>
<td>$200,000</td>
<td>Proceed with twin tunnel for future trail connection by Aurora</td>
</tr>
<tr>
<td>Farm Way</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leslie Street – 380 metres north of St.</td>
<td>275,000</td>
<td>Proceed with twin tunnel for future trail connection by Aurora</td>
</tr>
<tr>
<td>John’s Sideroad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. John’s Sideroad – 325 metres west of</td>
<td>0</td>
<td>Proceed with modified bridge design for future trail connection</td>
</tr>
<tr>
<td>Leslie Street</td>
<td></td>
<td>by Aurora</td>
</tr>
<tr>
<td>Leslie Street – 130 metres south of St.</td>
<td>0</td>
<td>Not recommended</td>
</tr>
<tr>
<td>John’s Sideroad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>$475,000</td>
<td>$950,000</td>
</tr>
</tbody>
</table>

1Funded through Municipal Partnership Program
2Not eligible for additional Partnership Program Funds

Staff recommend that additional funding for the Pedestrian and Cycling Municipal Partnership Program be included for consideration as part of the 2014 Capital Budget submission to cover the Regional portion of these costs.

6. LOCAL MUNICIPAL IMPACT

The Town of Aurora Council resolution from its November 1, 2011 approved the principle of a 50/50 cost sharing arrangement with York Region based on an estimate of $1,200,000 per crossing. Town of Aurora has been requested to submit an application under the Pedestrian and Cycling Municipal Partnership Program which requires a funding commitment from Aurora Council for 50% of the costs of both crossings or $475,000.

The recommended active transportation underpass trail crossings and connecting trials are included in Aurora’s Trails Master plan and all connecting trails are included in the Ontario Municipal Board (OMB) approved Secondary plan for the Aurora 2C lands.
7. CONCLUSION

Based on the relatively low incremental costs and expected improvements in safety and efficiency, grade separated active transportation crossings have been identified as the preferred solution for trail crossings of Regional roadways.

For more information on this report, please contact Steven Kemp, Director, Traffic Management and ITS at Ext. 5226.

The Senior Management Group has reviewed this report.

Recommended by: Approved for Submission:

Kathleen Llewellyn-Thomas, P. Eng. Bruce Macgregor
Commissioner of Transportation and Chief Administrative Officer
Community Planning

June 12, 2013

Attachments (2)
Underpass Locations

Active Transportation Underpass Crossing of Leslie Street and St. John's Sideroad
June 12, 2013

Legend

- ★ Proposed Underpass
- ● Underpass Not Recommended
- — Regional Road

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Traffic Management & Intelligent Transportation Systems
TRANSPORTATION AND COMMUNITY PLANNING
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Path: G:\Transportation\T09 - TrafficSafety\Safety Program\Traffic Safety Staff\Lucchese Traffic\MAPS - Various\Underpass Report At1.mxd
Dear Mr. Kelly:

Re: IES11-055 - Leslie Street and St. John’s Sideroad Pedestrian Trail Crossings

Please be advised that this matter was considered by Council at its meeting held on November 8, 2011. In this regard, Council adopted the following resolution:

THAT Council receive report IES11-055; and

THAT Council support Option 2 - Underpasses just below grade as a reasonable solution to pedestrian access; and

THAT Council approve the principle of a 50/50 funding arrangement with York Region based on an estimate of $1.2M per underpass and subject to Regional approval; and

THAT Council approve a 2012 budget of $50,000 per crossing to accommodate 50 percent of the design costs to be completed and funded through York Region; and

THAT staff investigate funding alternatives and partnerships.
Enclosed is the staff report pertaining to this matter. Through inadvertence this was not formally communicated at the time.

Yours-truly,

John D. Leach
Director of Customer and Legislative Services/Town Clerk

JDL/pt

Copy: Director of Infrastructure and Environmental Services
director of Parks and Recreation Services
SUBJECT: Leslie Street and St. John's Sideroad Pedestrian Trail Crossings

FROM: I. Simanovskis, Director of Infrastructure & Environmental Services

DATE: November 1, 2011

RECOMMENDATIONS

THAT Council receive report IES11-055; and

THAT Council support Option 2- Underpasses just below grade as a reasonable solution to pedestrian access; and

THAT Council approve the principle of a 50/50 funding arrangement with York Region based on an estimate of $1.2M per underpass and subject to Regional approval; and

THAT Council approve a 2012 budget of $50,000 per crossing to accommodate 50 percent of the design costs to be completed and funded through York Region.

PURPOSE OF THE REPORT

This report provides further information on activities related to the St. John's Sideroad and Leslie Street underpasses.

BACKGROUND

At its meeting of April 14, 2009, Council adopted the following recommendation from the Town of Aurora Leisure Services Advisory Committee meeting of March 23, 2009 and its associated Trails Sub-Committee:

"That Staff be directed to complete the following recommendations:

THAT the Leisure Services Advisory Committee recommends to Council that all of the information concerning grade separated trail crossings that are being contemplated by the Trails Sub-Committee associated with the St. John's Sideroad/ Leslie Street Corridor be forwarded to the appropriate Town or Region of York Staff for their comments and inclusion in the redesign of these roads; and
November 1, 2011

THAT separated multi-use bike routes be set further into the boulevard and separated from the curb by a grass strip and that St. John’s Sideroad, Bayview Avenue and Leslie Street reconstruction projects respect that standard and include physically separated multi-use trails; The Town has been supporting the developing of a Trails Master Plan that is being developed through the Leisure Service Advisory Committee (LSAC) and the Trail Sub-Committee. Proposed trails mapping has been submitted to LSAC in 2009 and the intent is that this mapping form the basis for the future Trails Master Plan.”

At its meeting on November 10, 2009, Council adopted the following recommendations from the Leisure Services Advisory Committee meeting held on October 15, 2009.

“THAT the Leisure Services Advisory Committee receive the information being presented on the Town of Aurora Trails Map; and

THAT the Trails Sub-Committee recommends to Council and is supported by the Leisure Services Advisory Committee that the proposed trails as recommended by the Trails Sub-Committee in the 2C Secondary Planning Area be adopted; and

THAT Public Works Staff be directed to continue to work with the Region of York to construct three grade separations as indicated on the mapping at the St. John’s Sideroad and Leslie Street locations; and

THAT Staff be requested to investigate the process required in order to obtain level and grade separated railway crossings; and

THAT this resolution be referred to the 2C Secondary Planning Committee for implementation.”

Town staff supported by a representative of the Trails Sub-Committee met with Regional staff on July 20, 2009 and provided correspondence to the Region on August 13, 2009 regarding consideration of underpasses as follows:

- Appreciating that an early request is desired, what is the timing envelope for requesting that the underpasses be considered for both projects, and would an addendum to the ESR be required if the request is submitted after the studies are completed?
- What funding opportunities exist through the Region to support pedestrian trail improvements?
- Could an estimate for underpass construction be provided in advance of town design criteria?
A formal response was received by the Region on June 29, 2010 for Leslie Street and August 30, 2010 for St. John’s Sideroad recommending against underpasses.

A report was prepared for the Town Council meeting of September 14, 2010 (attached as Appendix “A”) and the following recommendations were carried:

“THAT York Region be requested to include a description and identify the potential underpasses along St. John’s Sideroad and Leslie Street within their current environmental studies where possible; and

THAT York Region be requested to include funding for this project in their 2011 capital program as the project supports the Regional initiatives of ‘Healthy Communities’, ‘Walkable Communities’, and ‘Linked Green Spaces’, and are of regional significance; and

THAT a copy of this report be provided to the York Region Clerk’s Office.”

In addition, the Commissioner of Transportation from York Region delegated at the September 14, 2010 meeting on the matter with the following comments being recorded in the minutes as follows:

(b) Kathleen Llewellyn-Thomas, Region of York
Re: Item 1(6) – IES10-043 – Leslie Street and St. John’s Sideroad

Pedestrian Trail Crossings
Kathleen Llewellyn-Thomas, Commissioner of Transportation Services for the Region of York, and Steve Collins, Manager of Capital Projects (Roads Branch-Transportation Division), discussed and updated Council on the three projects currently underway. Mr. Collins stated that currently there are two significant projects underway in the Town of Aurora. He discussed the Leslie Street project that extends from Wellington Street to Mulock Drive. It is in the environmental assessment process stage and has gone through a second public meeting. Mr. Collins noted that even though the development is in the latter stages, the process allows for consultation and discussion until the environmental assessment report is filed. He said that they would continue to work with staff and the public to facilitate responding to questions. The environmental assessment study should be ready by the first quarter of 2011 and once that has received clearance it would move onto the detailed engineering stage with a proposed start to construction in 2015. Mr. Collins advised that the St. John’s Sideroad project (Bayview Avenue to Woodbine Avenue) is not scheduled to start construction until 2014. He noted that this project
is a continuation of the phased-in implementation that originally commenced in 2000. Mr. Collins said that there has been discussion with Town staff and with Mr. Wehrenberg regarding technical analysis and how the Region can participate to facilitate trail crossings. He advised that interesting ideas can be considered through the environmental assessment vehicle. Ms Llewelyn-Thomas noted that many ideas had not been considered previously within the original scope of the project but that alternatives will be looked at by Regional Council for advantages and/or disadvantages to be the most cost effective to the public. She stated that as there had not been crossings there in the past, negative impacts had not been considered, but as these crossings are now potentially desirable for the future, consideration would be given to accommodate future plans and optimize the investment.

(c) Klaus Wehrenberg
Re: Item 1(6) – IES10-043 – Leslie Street and St. John’s Sideroad

Pedestrian Trail Crossings
Klaus Wehrenberg stated that pedestrian crossings are not just for pedestrians but also for cyclists and for linking green spaces as well. He noted that when environmentally sensitive lands are involved, they need to be taken into consideration in the environmental assessment study. Mr. Wehrenberg requested answers to questions regarding the filing dates of environmental assessment reports for the Leslie Street widening, St. John’s Sideroad widening and the Water Main Project. He also wanted to know when the Water Main Project was separated from the Leslie Street widening. Mr. Wehrenberg expressed concern that, under the Regional Pedestrian and Cycling Master Plan approved by Regional Council in 2008, surveys that were to be statistically valid were not conducted as originally mandated under the Terms of Reference. He stated that in contrast with the Town of Aurora’s Parks and Recreation Services Department survey, input received showed that the most important aspect was walking, cycling, and hiking, and that it was desirable to have infrastructure to accommodate self-propelled traffic. Mr. Wehrenberg noted that with the potential employment opportunities for over 5,000 people east of Leslie Street and potentially 8,000 people living west of Leslie Street this will create a tremendous amount of self-propelled traffic between these two areas. He also said there are environmentally sensitive lands that need to be linked. He stated that all of these needs should be considered for accommodation and connection. Mr. Wehrenberg said that the Region decided to reconstruct these
November 1, 2011 - 5 - Report No. IES11-055

roads so they should carry the costs. He stated that the Region should also deal with the impacts and provide the means for correction.

(b) Kathleen Llewellyn-Thomas, Region of York
Re: Item 1(6) – IES10-043 – Leslie Street and St. John’s Sideroad

Pedestrian Trail Crossings
Mr. Collins responded to the inquiries from Mr. Wehrenberg and explained that the St. John’s Sideroad environmental assessment was originally filed in 2000 for the phase from Yonge Street to Woodbine Avenue, and the Leslie Street project was separated from the Water Main Project because the schedule changed on the Water Main Project that would allow it to be pre-approved to the design and construction stage. He noted that York Region had the opportunity to take advantage of modifications to the process which could speed up the Water Main Project. Ms Llewellyn-Thomas noted that she would be holding back on the filing of the environmental assessment report until the new year when she would present that along with the Town of Aurora’s concerns so that they will be addressed at the same time.

In response to the Council’s request, the York Region staff prepared a report for Regional Council that was presented to the Committee on February 2, 2011. The following recommendations were carried:

“It is recommended that Regional Council:

1. Approve the at-grade pedestrian/cyclist crossings of Leslie Street (Y.R. 12), between Wellington Street (Y.R. 15) and Mulock Drive (Y.R. 74), and St. John’s Sideroad (Y.R. 26), between Bayview Avenue (Y.R. 34) and Woodbine Avenue (Y.R. 8), as the preferred alternative for accommodating pedestrian and cyclist movements across the Regional corridors in this area.

2. Approve the inclusion of the at-grade pedestrian/cyclist crossings on Leslie Street as the preferred alternative in the Environmental Study Report for the widening of Leslie Street (Y.R. 12), from Wellington Street (Y.R. 15) to Mulock Drive (Y.R. 74), and in the detailed design of St John’s Sideroad (Y.R. 26), from Bayview Avenue (Y.R. 34) to Woodbine Avenue (Y.R. 8).”

At its meeting of September 13, 2011, Council carried the following motion:
November 1, 2011 - 6 - Report No. IES11-055

"THAT the Region be advised that a response has not been received for Aurora's request for grade separations: and

THAT a meeting be requested with the Region to discuss the Leslie Street reconstruction, and the St. John's Sideroad and Leslie Street underpasses; and

THAT staff provide a written report to Council."

The Region has been notified of the motion and a meeting occurred with the Region on October 13, 2011 regarding this matter. This report fulfills the final part of the above motion and provides a comprehensive history of the matter for Council consideration.

COMMENTS

The Council of Aurora is provided this report as a summary of activities to date on this matter to allow for an informed decision.
The matter of underpasses and the overall implementation of the Trails Master Plan has been a long standing vision for the Parks and Recreation Department and the Town. Infrastructure and Environmental Services was requested to assist in the realization of underpasses as part of the input to the Regional road projects for Leslie Street and St. John's Sideroad. Direction from the previous Council was made as outlined in Appendix "B" and a Regional response recommending at grade crossings was adopted by Regional Council.

All pertinent activity on this matter up to February 2011 is included in the appendices and provides the foundational information on decisions to date.

Meeting of October 13, 2011 provided additional opportunity to communicate Town of Aurora and York Region requirements.
The meeting with York Region senior staff was another opportunity to review the history of the underpasses and clarify understanding of the Region's and Town's positions on the matter. The outcome of the meeting was an understanding that underpasses are a critical feature in the implementation of the Trails Master Plan for which the plan would be significantly diminished without them. The Region's position relates to Regional versus local priorities and that full funding of these underpasses does not make economic sense considering all the other Regional needs. However, the Region would reconsider underpasses if the Town was able to demonstrate a financial commitment towards the project. A commitment of fifty percent funding was suggested as a reasonable target for consideration. It is from this point that further information is being provided.

Future direction on underpasses is now a financial issue and decisions at this point require a better understanding of the proposed costs.
The capital cost for underpasses has been quoted as $1.0M to $1.2M per crossing
depending on length. This estimate was provided through the Region as part of the preliminary engineering work undertaking during the Environmental Assessment (EA) process. There have been concerns about the validity of these estimates and requests for detailed design and tendering costs to be secured as a more accurate way of arriving at costs. Understanding the timing and cost of these activities, the Region at this point is unwilling to incorporate the underpasses in the detailed design without certainty that the Town will contribute funding towards the project.

The Region has been clear that the budget for an underpass is based on a limited scope and that required additional costs must be considered by the Town. The cost estimate for an underpass is based on the following assumptions:

- It is an order of magnitude estimate which by definition is an estimate with an implied accuracy of -25% to +75%.
- There is no grading or ramping included such as approaches or required soil stabilization outside the limit of the underpass.
- Length is determined based on a future widened road with 1.0m of cover or just below the road surface.
- Tunnel is a concrete box with dimensions of 2400mm x 3000mm wide (7'6" high by 9'-10" wide).
- No other works such as lighting or all season use of the underpass are included.

Additional factors requested by the Trails Sub-committee that will increase the cost and that are not considered in the above estimate are:

- The underpass width should be 5000mm not 3000mm (16'-5" wide).
- Lighting should be equal to daylight quality 24 hours per day (like a tennis court).
- The underpass should be at the base of the valleys to better connect to the trails network.

The Regional Order of Magnitude Estimate Methodology has been included to inform staff on the considerations and confidence of the current estimate. An ongoing question has been the level of accuracy of the current estimate. The Region has provided the details of the estimate which is included as Appendix “D”. The hope of the Trails Sub-Committee has been that an accurate “tendered cost” will be lower than the estimate which will make the underpasses more attractive. However, based on the information provided and past experience with capital projects, the tendency is for final construction costs to exceed early estimates. This may not be as extreme in the case of the underpasses as the design parameters can be reasonably defined. However, unknown conditions such as soils, final location and market conditions can significantly influence the final cost.

The Town must be comfortable with current available information to make a “go/no go” decision understanding that future key decision points exist where final commitments can be reconsidered.
As with any significant capital project, a decision to proceed can only be based on the information known today. Should the current information fit the investment strategy of the Town then the project should be approved. As new information emerges and conditions change, the test can be revisited and alternate directions proposed. It is not reasonable to expend significant engineering effort and costs through a tendering and design process for the sole purpose of securing accurate costs after which a decision is rendered. Those opportunities will occur as the project moves through an incremental commitment process.

Staff considered three cost scenarios for a typical underpass to determine overall cost implications.

To better inform a decision, staff prepared three separate cost estimates for a proposed crossing on Leslie Street just south of St. John’s Sideroad. The road section is included as Appendix “E” and is from the Region’s EA documents. The estimates are based on 1) a level crossing as proposed by the region, 2) an underpass just below grade as evaluated by the region, and 3) an underpass at the base of the valley as requested by the trails committee. The tables are included as appendix “F” and summarized as follows:

**Option 1 - Level Crossing**

$100,000 to $200,000 as reported by the Region with an additional $22,000 required for access points.

**Option 2 - Underpass just below grade**

$1,000,000 regional estimate with an additional $43,000 for lighting and access points.

**Option 3 - Underpass at valley floor**

$1,800,000 underpass with an additional $40,000 for lighting and access points.

The Trails Sub Committee request for wider underpasses increases costs.

The request to increase the underpass by over 60 percent will have an impact on the cost per meter as increased bearing capacity will have to be factored into the construction. Assuming an impact of 20 percent in cost impact would add an additional $200,000 to Option 2, and $360,000 to Option 3.

**ALTERNATIVE(S) TO THE RECOMMENDATIONS**

As directed by Council

**FINANCIAL IMPLICATIONS**

Trails Master Plan identifies long term funding needs including consideration for underpasses.
November 1, 2011 - 9 - Report No. IES11-055

There is currently no funding approved in the capital budget for this project. The recently adopted Trails Master Plan identifies underpasses as an integral component of the trails network and considered costs in the long term capital program.

York Region is willing to consider 50/50 cost sharing alternative. The Region has indicated consideration of 50 percent cost sharing on the underpasses which will require Regional approval.

York Region Pedestrian and Cycling Municipal Partnership Program as a funding opportunity. There may be funding available via other programs offered by the Region or through other levels of government.

The regional partnership program is a program that funds up to 50 percent of a local municipal project for qualifying pedestrian and cycling infrastructure that supports a regional scale network. This program was used to partially fund the Town’s section of the Nokida Trail. The York Region Pedestrian and Cycling Municipal Partnership Policy is attached as Appendix “G”. Conditions of the program include:

- Municipality must commit a minimum of 50 percent of the funding;
- An application must be submitted;
- The program itself has an annual funding cap of $500,000 for the entire region;
- Will only fund infrastructure that forms part of a network plan adopted by the municipality;
- The design and public consultation must be completed and the project shovel ready;
- Must support a regional scale network;
- must support the objectives and policies of the Region;
- Resolution of local council; and
- Maintenance and responsibility is assumed by the municipality.

CONCLUSIONS

This report outlines current available information on the costs and implications of underpasses for Leslie Street and St. John’s Sideroad. Council has previously requested that the Region fund construction of the requested underpasses and the Region has committed to only fund level crossings which are currently included in the EA documents. It is requested that Council provide direction on this issue.

ATTACHMENTS

- Appendix “A” – Report No. IES10-043 – Leslie Street and St. John’s Sideroad Pedestrian Trail Crossings
- Appendix “B” – Extract from September 14, 2010 Council Meeting
November 1, 2011 - 10 - Report No. IES11-055

- Appendix “C” – York Region Transportation Services Committee Report - February 2, 2011
- Appendix “D” – York Region Estimate
- Appendix “E” – Leslie Street Class EA Study
- Appendix “F” – Leslie Street Crossing – Order of Magnitude Estimate
- Appendix “G” – York Region Pedestrian and Cycling Municipal Partnership Policy

PRE-SUBMISSION REVIEW

Executive Leadership Team meeting of October 19, 2011

Prepared by: Ilmar Simanovskis, Director of Infrastructure and Environmental Services - Ext. 4371

[Illustration of signatures]

Ilmar Simanovskis  Neil Garbe
Director of Infrastructure  Chief Administrative Officer
& Environmental Services
APPENDIX “A”

TOWN OF AURORA
GENERAL COMMITTEE

SUBJECT: Leslie Street and St. John’s Sideroad Pedestrian Trail Crossings

FROM: Ilmar Simanovskis, Director, Infrastructure and Environmental Services

DATE: September 7, 2010

RECOMMENDATIONS

THAT York Region be requested to include a description and identify the potential underpasses along St. John’s Sideroad and Leslie Street within their current environmental studies where possible; and

THAT York Region be requested to include funding for this project in their 2011 capital program as the project supports the Regional initiatives of ‘Healthy Communities’, ‘Walkable Communities’, and ‘Linked Green Spaces’; and

THAT, should York Region not provide funding, the Town of Aurora review funding requirements through the 2011 budget process; and

THAT a copy of this report be provided to the York Region Clerk’s Office.

PURPOSE OF THE REPORT

To request regional support in proceeding with implementation of grade separated crossing along Leslie Street and St. John’s Sideroad.

BACKGROUND

At its meeting of April 14, 2009, Council adopted the following recommendation from the Town of Aurora Leisure Services Advisory Committee meeting of March 23, 2009 and its associated Trails Sub-Committee:

“That Staff be directed to complete the following recommendations:

THAT the Leisure Services Advisory Committee recommends to Council that all of the information concerning grade separated trail crossings that are being contemplated by the Trails Sub-Committee associated with the St. John’s Sideroad/Leslie Street Corridor be forwarded to the appropriate Town or Region of York Staff for their comments and inclusion in the redesign of these roads; and

THAT separated multi-use bike routes be set further into the boulevard and
August 17, 2010 - 2 - Report No. IES10-043

separated from the curb by a grass strip and that St. John's Sideroad, Bayview Avenue and Leslie Street reconstruction projects respect that standard and include physically separated multi-use trails; The Town has been supporting the developing of a Trails Master Plan that is being developed through the Leisure Service Advisory Committee (LSAC) and the Trail Sub-Committee. Proposed trails mapping has been submitted to LSAC in 2009 and the intent is that this mapping form the basis for the future Trails Master Plan."

At its meeting on November 10, 2009, Council adopted the following recommendations from the Leisure Services Advisory Committee meeting held on October 15, 2009.

"THAT the Leisure Services Advisory Committee receive the information being presented on the Town of Aurora Trails Map; and

THAT the Trails Sub-Committee recommends to Council and is supported by the Leisure Services Advisory Committee that the proposed trails as recommended by the Trails Sub-Committee in the 2C Secondary Planning Area be adopted; and

THAT Public Works Staff be directed to continue to work with the Region of York to construct three grade separations as indicated on the mapping at the St. John's Sideroad and Leslie Street locations; and

THAT Staff be requested to investigate the process required in order to obtain level and grade separated railway crossings; and

THAT this resolution be referred to the 2C Secondary Planning Committee for implementation."

Town staff supported by a representative of the Trails Sub-Committee met with Regional staff on July 20, 2009 and provided correspondence to the Region on August 13, 2009 (Appendix "A"), regarding consideration of underpasses as follows:

- Appreciating that an early request is desired, what is the timing envelop for requesting that the underpasses be considered for both projects, and would an addendum to the ESR be required if the request is submitted after the studies are completed?

- What funding opportunities exist through the Region to support pedestrian trail improvements?

- Could an estimate for underpass construction be provided in advance of town design criteria?

A formal response was received by the Region on June 29, 2010 for Leslie Street and Aug 30, 2010 for St John's Sideroad (Appendix "B").
August 17, 2010 - 3 - Report No. IES10-043

This report reviews planning status of grade separated crossing and the Regional responses to date, along with recommended actions.

COMMENTS

1. Planning Status Related to Pedestrian and Trails Network

York Region Pedestrian and Cycling Master Plan Study

In March 2008, York Region completed the Pedestrian and Cycling Master Plan Study, which is "intended to guide the Region as it works with local municipalities over the next 25 years and beyond to implement a comprehensive pedestrian system and on and off-road region-wide cycling network." There was significant stakeholder engagement in the development of this plan in particular with Mr. Atkins being represented on the Technical Advisory committee and Mr. Wehrenberg on the Public Advisory Committee both representing interests for the Town of Aurora.

The vision of the plan is to create a pedestrian and cycling supportive environment that encourages both utilitarian and recreational travel by walking, cycling and using public transit through:

- Established promotional and educational policies and programs including a marketing strategy;
- A continuous system of sidewalks on Regional and local roads as well as a designated regional-scale network of cycling facilities;
- A regional-scale network integrated with local municipal pedestrian and cycling infrastructure and public transit service that connects communities and people of all ages with where they live, work and want to go.

Even though local municipalities are responsible for implementing sidewalks, trails and encouraging pedestrian friendly land development, the Region also has a significant interest in improving conditions for walking and cycling in York Region. The intent of this plan is therefore to prioritize, assist in implementation and potentially fund projects where local initiatives support the regional objectives.

As the plan was intended to serve a regional context, route selection was focused on supporting the regional context of connectivity. In achieving this objective there were also a number of criteria considered during the final route selection being safety, connectivity/access, convenience, attractiveness, cost and route alignment.

The 10 year planning horizon for improvements to the Aurora pedestrian system includes:

- New sidewalks along Bathurst Street between St. John's Sideroad and Bloomington Road, along Bloomington Road to Yonge Street and along St. John's Sideroad from Bathurst Street to Yonge Street.
The 5 year planning horizon for improvements to the Aurora cycling network includes:

- Providing a north south connection along Leslie Street;
- Providing a east west route generally between Bathurst Street along St. John's Sideroad, Bloomington Road, Wellington Street, and Vandorf Sideroad where such facilities do not currently meet the regional intent; and
- Provide north south connections along Yonge Street and Bayview Avenue where practical and in line with road reconstruction.

A drawing of the Plan is presented as Appendix "C". The significance of the Plan in relation to this report is that the Region has not identified any portion of the pedestrian and cycling network within the 2C lands as would be expected considering the regional context.

**Town of Aurora Official Plan and 2C Secondary Plan Status**

The Town is currently updating its Official Plan (OP) and in the process has reviewed policy related to trails. The current OP contains municipal trail network amendments which were adopted December 1993 and approved in February 1995 which state:

"3.5.2.5 a) x consider providing grade separation at key intersections of trails with railways and arteriary roads; where trails cross roads at grade, signs and where appropriate signals shall assist safe crossing and orientation; at grade crossing of trails at Regional roads should only be made at controlled intersections;"

Appendix "D" refers to Schedule "I" of the current OP titled Aurora Trail Network Concept.

The draft proposed policy "Draft 2" dated July 19, 2010 is virtually unchanged with the exception of the word "Regional" as follows:

"14.2.8 a) x consider providing grade separation at key intersections of trails with railways and Regional roads; where trails cross roads at grade, signs and where appropriate signals shall assist safe crossing and orientation; at grade crossing of trails at Regional roads should only be made at controlled intersections;"

It is therefore clear that the Town's policies support the notion of considering grade separated crossings at Regional roads.

The Draft Proposed Policies for the 2C Secondary Plan Draft 1, dated July 9, 2010, also contains similar wording as above under proposed section 6.2.8 a).

**Town of Aurora Trails Master Plan**

The Town, in conjunction with support and input from the Trails Sub-Committee, is in the process of completing the Draft Trails Master Plan. Within this document, Section 6.2.2
refers to Grade Separated Crossings as follows:

"It is intended that the proposed grade separated crossings be constructed at the same time the connecting trail segment(s) are constructed. However, should an opportunity arise in advance of the timing identified in the master plan, the Town should work with appropriate agencies to implement the crossing. For example, the Town should work with York Region when a Regional road is being upgraded and a grade separation has been identified in the master plan as the preferred method of achieving the crossing. In these cases, the schedule will be dependent on the Region’s schedule for Environmental Assessment and construction. In some locations it may be possible and preferable to develop an interim solution such as a pedestrian activated signal or median refuge island."

Costs to implement the grade separated crossing are not included in the estimated network costs for the following reasons:

- Costs for these vary widely depending on the style and ultimate design of the structure(s);
- The design, timing, and construction of many of the proposed grade separated crossings would be subject to infrastructure improvements being made by other agencies such as York Region. In these cases the final design would be part of a larger infrastructure improvement project that would be subject to an Environmental Assessment process and subsequent detail design; and
- There may be an opportunity to partner with agencies for these projects. For example, it is reasonable to assume that the Town would be able to partner and cost-share with the Region for grade separations of Regional road, thus an accurate estimated cost to the Town for each can not be developed until each location has been studied in more detail as part of pre-design of those structures.

Appendix “E” refers to the Draft Trails Master Plan Location Map for various infrastructures dated March 5, 2009.

2. Council Support Requested for Grade Separated Trail Crossings on Regional Roads

The Town, through the above approved and pending policies and Council endorsed resolutions, is requesting that the Region consider the inclusion of three underpasses along Leslie Street and one underpass along St. John’s Sideroad as outlined in Appendix “E”.

This request has been communicated to Regional staff as early as July 2009. The Region’s position to date has been to not actively consider this request until such time as the Town, through resolution of Council, requests this infrastructure be included and that a funding source be provided to offset the environmental assessment, engineering and construction
August 17, 2010 - 6 - Report No. IES10-043

Costs. Considering the recent response from the Region, it is now appropriate to seek Council support on these crossings.

3. Status of St. John’s Sideroad and Leslie Street Road Reconstruction Projects

The two regional roads are proceeding separately as the regional road program identifies the roads being completed on different time lines.

St. John’s Sideroad

The St. John’s Sideroad project has a planned completion date of 2015 and will provide for two lanes of traffic. The Environmental Assessment (EA) and concluding Environmental Assessment Report (ESR) have been completed and the detailed design is over 60 percent complete at this time. The Region intends to tender the project in early 2012, subject to property and utility relocation needs, for completion by 2015.

At this point, it may be necessary to prepare an addendum to the ESR to consider the impacts of a grade separated crossing along the water course.

Leslie Street

Leslie Street is planned to be completed in 2016 and will provide for four lanes of traffic. The EA for this project is nearing completion with the filing of the ESR planned for early 2011. Detailed design would start the summer/fall of 2011, with tendering anticipated for early 2015.

Similar to St. John’s Sideroad, an addendum to the ESR may be required to include the three proposed underpasses. Although there may be an opportunity to include a brief description of the desire to proceed with underpasses, the Region has indicated that any reference to underpasses in the current EA would not be significant and would require additional work during the design phase.

4. Approval Requirements under the Municipal Class Environmental Assessment Process

The Municipal Class Environmental Assessment Process is the Ministry of Environment’s approved process for environmental approvals of specific projects. The assessment process is divided into five phases of activity and, depending on the defined schedule of the proposed activity, may require some or all of the phases to be completed. These phases are:

1. Problem or Opportunity
2. Alternative Solutions
3. Alternative Design Concepts for Preferred Solutions
4. Environmental Study Report (ESR)
5. Implementation/Monitoring
A project is categorized based on its environmental impact as a Schedule A or A+, B, or C project. Schedule A projects are considered pre-approved with minimal requirements and Schedule C projects require full application of the process.

Construction of underpasses or overpasses for pedestrian, recreational, or agricultural use are identified as Schedule B projects of under $2.2M and as Schedule C projects of over $2.2M. As the project scope is above $2.2M, this project would require a Schedule C environmental assessment which involves all of the above five steps.

**Trails Master Plan Status and Conformance to EA Process**

The Town is currently undertaking a trails master plan project to set the planning direction for the longer term. This plan has been scoped to identify trail locations but does not address grade separated crossings in relation to the environmental assessment process requirements. This document is in final draft form and is expected to be presented to Council before fall 2010.

Within the context of the environmental assessment process, a master plan can be used to fulfill, at a minimum, the first two phases of the above process. To update the document to satisfy the requirements of the Class EA process, at a minimum, the following would have to be completed:

- Define problem as it relates to the crossings (i.e. need to move people from east side to west side of Leslie Street as part of trails network);
- Identify all alternative solutions available;
- Inventory natural, social and economic environments;
- Identify impacts of alternative solutions and mitigating measures;
- Identify recommended solution for each location (i.e. underpass or at grade crossing);
- Public and agency consultation; and
- Notice of completion and 30 day public and agency review.

A master plan that includes the environmental aspects of these crossings would be the logical deliverable to the Region in order to proceed to the subsequent phases of the Class EA process within the context of their Class EA activities for both of the road projects. As these crossings are likely to be considered a Schedule C undertaking due to the expected cost, an addendum to the current road ESR’s would most likely be required as the current timing of the regional projects would not provide sufficient time to complete the necessary investigations for these crossings. The St. John’s Sideroad ESR has already been filed and the Leslie Street ESR is scheduled to be filed in early 2011.

Appendix “F” provides information from the MEA Municipal Class Environmental Assessment Process, and Appendix “G” provides excerpts for the Draft Trails Master Plan related to underpasses.
5. Regional Funding Opportunities

The Region has indicated that they are unable to provide any funding towards the implementation of these crossings. If the Town was interested in including these crossings in the two road projects, then the Town would have to fund any required feasibility studies, design and construction costs. The Region was unable to commit to including any detailed analysis of the crossings in their current program until the Town confirms that funding is available and approved for this project.

The Regional Pedestrian and Cycling Master Plan Study also does not identify any available funding for this project as local trails and regional road underpasses are not considered in the Plan. The focus of the Plan is for pedestrian crossings at planned intersections as supported by the identified routes within the Plan.

6. Estimated Construction Costs

The Region provided preliminary construction cost estimates for the three crossings on Leslie Street. The estimate was based on a shallow underpass (approximately 1m below road grade), with dimensions of 3.0m wide by 2.4m high. The cost was approximately $1.0M per crossing for a total estimated cost of $3.2M for the three crossings. The trails master plan has identified a minimum width of 4.2m or greater for structures exceeding 18m in length, and a minimum height of 3.0m.

Also, there is a proposed watermain along Leslie Street which limits the location of any crossing which effectively forces either a shallow crossing or a deep crossing. Subsequent discussion with Regional staff identified significant additional costs if the crossings were to be either of larger scale or located at a lower elevation near the valley floor. The estimate for each crossing may be upwards of $1.7M or $5.1M for three crossings.

Using the same cost parameters, it would be expected that the cost for the St. John's crossing would also be approximately $1.0M to $1.7M.

The Region also confirmed that the estimates were only for the crossings and did not include any entrance grading, ramps or property issues. Other considerations include lighting, security, accessibility issues, flood control and life safety and seasonal clearing requirements.

The Region's consultant provided the Town with an engineering estimate of $200,000 per crossing including electrical/lighting requirements and foundation design. It is expected that this estimate would also include any preliminary design and environmental assessment activities. This is an upper limit based on each tunnel being designed independently from the current regional studies and will be revised once a decision to proceed has been confirmed.
August 17, 2010 - 9 - Report No. IES10-043

7. Next Steps

Considering the status of these road projects and the Town's Trails Master Plan, the following steps are outlined for consideration:

- That the Region be requested to include these underpasses in the respective road projects to the extent possible.
- That the Region be requested to fund these projects as a logic extension of the regional pedestrian objectives.
- That the Town consider leading the first two phases of the Class EA process to confirm route selection.
- That a consultant be retained to undertake the first 2 phases of the Class EA process to recommend the preferred solution for the crossings.
- That the Region be requested to incorporate the work completed by the consultant and undertake the completion of the remaining phases of the Class EA process on behalf of the Town and in conjunction with the current work being undertaken for the roads.
- That a capital project be established in the 2011 budget cycle to identify the necessary funding for construction in the required years of the proposed projects.

ALTERNATIVE(S) TO THE REPORT

1. Town to fund and complete Phases 1 and 2 Class EA activities in advance of Regional support.
2. Not proceed with the implementation of the crossings.

FINANCIAL IMPLICATIONS

The construction budget for each crossing is $1.0M for a shallow crossing and up to $1.7M for deeper crossings. Increasing the crossing height and width would increase costs proportionately.

Funding for environmental assessments and design would be required for 2011/2012 with construction funding being required in the year of construction (2014/2015 and 2015/2015). The Region has been requested to provide the necessary funding for this project. Should the Regional funding request not be approved, staff will include the request for funding through the 2011 budget process.

CONCLUSIONS

The two projects, St. John's Sideroad and Leslie Street, are currently moving through the environmental and design phases. As underpasses for trail connections are a priority for the Town of Aurora, it is now appropriate to request the inclusion of these structures in the regional road projects.
August 17, 2010

- 10 -

Report No. IES10-043

It is therefore recommended to request that York Region include these structures in their projects and fund the projects in support of Regional pedestrian initiatives.

The Town should consider funding these projects in the 2011 capital plan, if no other source of funding is secured.

ATTACHMENTS

- Appendix "A" – Letter to York Region dated August 13, 2009
- Appendix "B" – Response letter dated June 29, 2010 from York Region
- Appendix "C" – Drawing of Plan for Proposed Cycling Network
- Appendix "D" – Schedule "I"-Aurora Trail Network Concept
- Appendix "E" – Draft Trails Master Plan Location Map
- Appendix "F" – Information from the MEA Municipal Class Environmental Assessment Process
- Appendix "G" – Excerpts from the Draft Trails Master Plan related to grade separated crossings

PRE-SUBMISSION REVIEW

Executive Leadership Team Meeting of August 9, 2010

Prepared by: Ilmar Simanovskis, Director of Infrastructure and Environmental Services - Ext. 4371

Ilmar Simanovskis
Director, Infrastructure &
Environmental Services

Neil Garbe
Chief Administrative Officer
APPENDIX “A”

Public Works Department
IA, Simanovskis
905-727-3123 ext 4571
tsimanovskis@e-aurora.ca

Town of Aurora
1 Municipal Drive,
Box 1000, Aurora, ON L4G 6J1

August 13, 2009

Mr. Paul Jankowski
General Manager, Transportation Services
Regional Municipality of York
90 Bales Dr E
East Gwillimbury, ON L0G 1B0

Dear Mr. Jankowski:

RE: Request for a pedestrian underpass for St. Johns Sideroad and Leslie Street

On July 20, 2009 Regional staff met with our staff and the Chair of the Trails Sub-Committee, Mr. Klaus Wehrenberg, regarding a request to incorporate several pedestrian underpasses along St. John's Sideroad and Leslie Street. The conclusion of the meeting was that Town staff would be required to submit a formal request before the underpasses would be considered. This request would be through Council once the Town's Trails Master Plan is endorsed.

In the interim, it is requested that the Region provide comment on the following:

- Appreciating that an early request is desired, what is the timing envelop for requesting that the underpasses be considered for both projects, and would an addendum to the ESR be required if the request is submitted after the studies are completed?
- What funding opportunities exist through the Region to support pedestrian trail improvements?
- Could an estimate for underpass construction be provided in advance of town design criteria?

Sincerely,

Ilmar Simanovskis, P.Eng.
Director, Public Works

cc. Stephen Collins, Region of York
Al Downey, Town of Aurora
Jim Tree, Town of Aurora
Klaus Wehrenberg
Town of Aurora
Request for Underpasses

Leslie St. EA – Wellington Street (Y.R. 15) to Malrock Drive (Y.R. 74)

* Above the proposed 750mm watermain
  * Extensive grading and ramping work will be required

- Option 3: The underpasses are placed at locations that are remote from the existing culverts, either above or below the proposed 750mm watermain.

The Town is to determine the details for the three options.

Klaus Wehrenberg indicated that he believes there is a fourth option of raising the road profile to allow the underpasses to be placed over the proposed 750mm watermain and clear existing utilities which may currently exist at normal depth of bury.
- This option will require relocation of all existing utilities that will be impacted as well as consideration for future utilities
- I indicated that the feasibility of this option is considered low as the road profile has already been set as part of the Leslie Street EA and raising the road profile will require additional funds with extensive fill.

3.0 Cost Estimate

I indicated that the Region completed order-of-magnitude cost estimates for the underpasses based on no grading and ramping consideration, lengths determined from future road widening (boulevard slope to boulevard slope), 1.0m cover below the road and for 3000mmx2400mm concrete box underpasses as follows:
- Crossing 1 – Length: 46m; Estimate = $1,200,000
- Crossing 2 – Length: 44m; Estimate = $1,000,000
- Crossing 3 – Length: 43m; Estimate = $1,050,000

4.0 Funding

I indicated that it was determined during the current EA and we agreed that the underpasses are not required and that this is a Town’s request.

I also indicated that cost estimate for the underpasses were not included in the Region’s preliminary cost estimate for the future works associated with the EA and final build-out of the road widening as this is not a cost that would have been incurred. The Town is to fund any additional consulting work that may require including any related additional feasibility, design, construction and cost estimate expenses that the Town may request the Region to undertake.

5.0 Inclusion in the Current Leslie Street EA

The Town will determine on how they may wish to proceed and provide information to the Region well before filing of the ESR for possible inclusion in the ESR.

Page 3 of 4
Town of Aurora
Request for Underpasses
Leslie St., EA – Wellington Street (Y.R. 15) to Mulesk Drive (Y.R. 74)

I indicated that it is possible to address your the request in the ESR, by noting that the issue will be looked at more closely at the detailed design stage and when the Town decides on how they wish to proceed.

6.0 Other Discussions

Other items which I indicated should be considered by the Town are:
- Maintenance of the underpasses
- Lighting of the underpasses
- Drainage and ramping requirements
- Usage – pedestrians; compliance with AODA requirements for accessibility; recreational vehicles; animals (width of crossings are to be determined by Town)
- Possible additional land requirements
- Flood proofing of the underpasses
- All season use of the underpasses

As you requested, we will provide the watermain drawings and the cost estimate of the culvert works as proposed in the EA, at the three crossings, under separate cover. In the meantime, please feel free to call me at 905-830-4444 x 5946 if you would like to discuss or need additional information.

Sincerely,

[Signature]

Harry Porszegi, P.Eng.
Project Manager

[Contact Info]

Copy to: Stephen Collings, Manager, Engineering, York Region (by email)
June 29, 2016

Mr. Ilmar Sinanovski, P.Eng.
Director, Infrastructure and Environmental Services
Town of Aurora
1 Municipal Drive
Aurora, Ontario
L4G 6J1

Dear Mr. Sinanovski:

Re: Town of Aurora’s Request for Three (3) Underpasses — Leslie Street Environmental Assessment (EA) — Wellington Street (Y.R 15) to Mulock Drive (Y.R. 74)

This is a summary of our meeting on June 18, 2010, in which we discussed preliminary findings for your request for three (3) underpasses on Leslie Street to be considered during the EA for Leslie Street from Wellington Street to Mulock Drive.

In attendance at the meeting were myself, yourself, Anca Mihail (Town's Manager of Engineering and Capital Delivery) and Klaus Wehrenberg (Council appointed Chair of Trails Sub-committee, Leisure Services Advisory Committee). Our discussion was generally in the following categories:

1. Overview of request
2. Possibility of underpasses
3. Cost estimate
4. Funding
5. Inclusion in the current Leslie Street EA.
6. Other discussions

1.0 Overview of Request

Your request for the underpasses was generally at or near locations of existing culverts as follows:

a) Crossing No. 1 — approximately 260m north of State Farm Way
   * Existing culvert is 2100mm CSP, to be replaced as per EA.

b) Crossing No. 2 — approximately 100m south of St. John’s Sideroad
   * Existing culvert is 2600mm x 2400mm concrete box to remain in place as per EA.
2.0 Feasibility of Underpasses

I indicated that the Region considered three options for the underpasses as follows:

Option 1: The underpasses are placed and be incorporated as part of the existing culverts.  
- This means that the existing culverts must be removed and replaced with substantially wider and higher culverts at substantial costs  
- LSRCA will have to be consulted and approved the works  
- Extensive grading and tamping work will be required to accommodate all expected users.

Note: Klaus Wehrenberg indicated that the Town's vision for the underpasses is that they be installed near the existing culverts and not as part of the existing culverts and be sized for animal crossing and all season use.

Option 2: The underpasses are placed as separate stand alone structure and would be sized appropriately.  
- Depending on the size of the underpasses, they can be placed:  
  * Below the proposed 750mm watermain  
  * Utilities must be considered for impact and relocation  
  * Extensive grading and tamping work will be required.
<table>
<thead>
<tr>
<th>Description of the Project</th>
<th>Cost Limit for Project Approved Under Schedule</th>
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<td>(Note: The Schedules shall be reviewed inclusively to ensure that the correct schedule is selected.)</td>
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<td>24. Reconstruction of a water crossing where the reconstructed facility will be for the same purpose, use, capacity and at the same location. (Capacity refers to either hydraulic or road capacity.) This includes ferry dока.</td>
<td>Pre-Approved: A, A+</td>
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<td>25. Reconstruction of a water crossing where the reconstructed facility will be for the same purpose, use, capacity or at the same location. (Capacity refers to either hydraulic or road capacity.) This includes ferry dока.</td>
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<tr>
<td>26. Construction of new water crossings. This includes ferry dока.</td>
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<td>27. Construction of new grade separations</td>
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<td>28. Construction of underpasses or overpasses for pedestrian, recreational or agricultural use</td>
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<tr>
<td>29. Construction of new interchanges between any two roadways, including grade separations and ramps to connect the two roadways.</td>
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<td>30. Reconstruction or alteration of a structure or the grading adjacent to it when the structure is over 40 years old, where the proposed work will alter the basic structural system, overall configuration or appearance of the structure.</td>
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**Additional Notes:**

- 31. Construction of noise barriers, i.e. structures such as walls and berms or a combination of the two.
- 32. New fence installations not associated with another project.
- 33. Utility removal, modification or relocation for safety or aesthetic purposes.
- 34. Restoration of a facility immediately after a natural disaster, provided the facility is for the same purpose, use, capacity and at the same location.
- 35. Projects planned and approved under Ontario Regulation 586/06 (see Section A.2.10.4 of Municipal Class EA).
- 36. Expansions, improvements and modifications to existing patrol yards and maintenance facilities where no land acquisition is required.
- 37. Expansions, improvements and modifications to existing patrol yards and maintenance facilities where land acquisition is required.
- 38. Establish new patrol yards or maintenance facilities.
- 40. Retirement of existing laneys.
- 41. All other road related works.
- 42. Any project which would otherwise be subject to this Class EA and has fulfilled the requirements outlined in Section A.2.9 of this Class EA and for which the relevant Planning Act documents have been approved or have come into effect under the Planning Act, R.S.O 1990, Chapter P.13, as amended.
EXHIBIT A.1  KEY FEATURES OF THE MUNICIPAL CLASS EA

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA

BASIC PROCESS
(See Exhibit A.2 for detailed flow chart)

Consultation Requirements

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<th>PHASE 4</th>
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<td>ALTERNATIVE SOLUTIONS</td>
<td>ALTERNATIVE DESIGN CONCEPTS FOR PREFERRED SOLUTION</td>
<td>ENVIRONMENTAL STUDY REPORT</td>
<td>IMPLEMENTATION</td>
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Schedule A/B Projects

Schedule B Projects

Schedule C Projects

Master Plans
(See Section A.2.7)

NOTES:

✓ Actions required during relevant phase

1 Schedule A, B and C projects, and Master Plans can also be integrated with the requirements of the Planning Act (See Section A.2.5)

2 Complete Phases 3 and 4 for any Schedule C projects included in the Master Plan prior to implementation

3 For Schedule A projects, public to be advised. See Section A.1.2.2.
APPENDIX “G”

Excerpt From the Draft Trails Master Plan Related to Grade Separated Crossings

5.9.2 Underpasses and Tunnels
Often an underpass or tunnel is the only way to cross significant barriers such as elevated railways and multilane highways. Designing trails through underpasses and tunnels can be challenging because of the confined space. Underpasses should be wide enough to accommodate all trail users whether they are traveling by foot, bicycle, in-line skates, wheelchair or other forms of transportation. Where feasible, it is suggested that trail widths through underpasses be equal to or greater than that of the approaching trail. The following are design considerations for underpasses or tunnels:

- The minimum recommended underpass or tunnel width for a multi-use trail is 3.6 m. Where the structure exceeds 18 m in length, in high traffic and/or urban areas the width should be increased to 4.2 m or greater;
- For shorter length underpasses, a vertical clearance of 2.5 m is usually sufficient recommended;
- For longer structures a vertical clearance of 3.0 m should be considered. If service and/or emergency vehicles are to be accommodated within the underpass, an increase in vertical clearance may also need to be provided;
- Underpasses and tunnels can be a security concern and also present maintenance challenges. To address these issues, tunnels should be well lit with special consideration made to security, maintenance and drainage. Approaches and exits should be clear and open to provide unrestricted views into and beyond the end of the structure wherever possible;
- Abutments should be appropriately painted with hazard markings;
- Offensive graffiti and debris should also be removed promptly and regularly; and
- Ideally, the transition between the trail and underpass crossing should be level and provide for accessibility. In the case where an underpass crosses beneath ground-level travel ways, ramps should ideally be provided to provide a transition down to the lower grade under the passage, with grade or alignment changes being taken up by the access ramps wherever possible.

6.2.2 Grade Separated Crossings
It is intended that the proposed grade separated crossings be constructed at the same time the connecting trail segment(s) are constructed. However, should an opportunity arise in advance of the timing identified in the master plan, the Town should work with appropriate agencies to implement the crossing. For example, the Town should work with York Region when a Regional road is being upgraded and a grade separation has been identified in the master plan as the preferred method of achieving the crossing. In these cases, the schedule will be dependent on the Region's schedule for Environmental Assessment and construction. In some locations it may be possible and preferable to develop an interim solution such as a pedestrian activated signal or median refuge island.
APPENDIX “B”

AURORA

EXTRACT FROM GENERAL COMMITTEE MEETING NO. 10-14
HELD ON TUESDAY, SEPTEMBER 7, 2010 AND ADOPTED AT
COUNCIL ON TUESDAY, SEPTEMBER 14, 2010

VIII CONSIDERATION OF ITEMS REQUIRING SEPARATE DISCUSSION

6. IES10-043 – Leslie Street and St. John’s Sideroad Pedestrian Trail Crossings

General Committee recommends:

THAT York Region be requested to include a description and identify the underpasses along St. John’s Sideroad and Leslie Street within their current environmental studies; and

THAT York Region be requested to include funding for this project in their 2011 capital program as the project supports the Regional initiatives of ‘Healthy Communities’, ‘Walkable Communities’, and ‘Linked Green Spaces’, which are of regional significance; and

THAT a copy of this report be provided to the York Region Clerk’s Office.

CARRIED

---

EXTRACT/CORRESPONDENCE ROUTING INFORMATION

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APPENDIX “C”

THE REGIONAL MUNICIPALITY OF YORK

Transportation Services Committee
February 2, 2011
Report of the
Commissioner of Transportation Services

REQUEST FOR GRADE-SEPARATED PEDESTRIAN UNDERPASS CROSSINGS OF
LESLIE STREET AND ST. JOHN’S SIDEROAD
TOWN OF AURORA

1. RECOMMENDATIONS

It is recommended that Regional Council:

1. Approve the at-grade pedestrian/cyclist crossings of Leslie Street (Y.R. 12), between Wellington Street (Y.R. 15) and Mulock Drive (Y.R. 74), and St. John’s Sideroad (Y.R. 26), between Bayview Avenue (Y.R. 34) and Woodbine Avenue (Y.R. 8), as the preferred alternative for accommodating pedestrian and cyclist movements across the Regional corridors in this area.

2. Approve the inclusion of the at-grade pedestrian/cyclist crossings on Leslie Street as the preferred alternative in the Environmental Study Report for the widening of Leslie Street (Y.R. 12), from Wellington Street (Y.R. 15) to Mulock Drive (Y.R. 74), and in the detailed design of St John’s Sideroad (Y.R. 26), from Bayview Avenue (Y.R. 34) to Woodbine Avenue (Y.R. 8).

2. PURPOSE

This report provides information to Regional Council related to the Town of Aurora’s request to construct grade-separated pedestrian underpass crossings of Leslie Street in the vicinity of St. John’s Sideroad and of St. John’s Sideroad, west of Leslie Street. A Regional context plan is appended (see Attachment 1).

3. BACKGROUND

The Town of Aurora has requested York Region fund and build grade-separated pedestrian underpasses as part of the Leslie Street and St. John’s Sideroad projects

In August 2009, the Town of Aurora submitted a letter requesting York Region to consider including grade-separated pedestrian underpasses in the ongoing Class
Request for Pedestrian Underpasses
Leslie Street and St. John Sideroad, Town of Aurora

Environmental Assessment (EA) for Leslie Street improvements and the ongoing detailed design project for St. John’s Sideroad improvements.

A grade-separated pedestrian underpass crossing is typically a culvert or bridge structure constructed below the elevation of the pavement. The structure facilitates pedestrian movements from one side of the Regional right-of-way to the other without pedestrians having to walk across the pavement.

The four pedestrian underpasses requested by Town of Aurora are generally located:
- Crossing Leslie Street approximately 260 m north of State Farm Way
- Crossing Leslie Street approximately 160 m south of St. John’s Sideroad
- Crossing Leslie Street approximately 380 m north of St. John’s Sideroad
- Crossing St. John’s Sideroad approximately 325 m west of Leslie Street

The locations of these crossings are appended to this report (see Attachment 2).

These underpasses are located in the vicinity of the Aurora 2C Lands, where municipal planning is currently at the Secondary Plan stage.

These pedestrian underpass crossings were not identified as being warranted in York Region’s Pedestrian and Cycling Master Plan (2008) because of the lack of need for the grade separated crossing and that pedestrian movements could be accommodated at signalized intersections.

Town of Aurora staff are currently completing a Trail Master Plan project and the recommended concept is expected to provide justification and more detailed information regarding the proposed trail network and the requested underpasses. This Trail Master Plan is planned to be presented to the Council of the Town of Aurora in 2011, for consideration.

York Region has three separate infrastructure projects underway in the vicinity of Leslie Street and St. John’s Sideroad

York Region has three separate infrastructure projects, at different phases of delivery, in the vicinity of Leslie Street and St. John’s Sideroad.

Staff are now completing the Class Environmental Assessment for Leslie Street improvements between Wellington Street and Mulock Drive

This section of Leslie Street is in the final stages of preparation of a Class EA for the road improvements. The Environmental Study Report (ESR) is anticipated to be finalized in the spring 2011. This report will recommend Leslie Street be widened to four lanes with left and right turn lanes at intersections, and centre left turn lane, where appropriate. The construction of this work is scheduled to start in 2015 based on the draft 2011 Ten Year Roads Construction Program.
Detailed design is also underway for upcoming improvements to St. John’s Sideroad between Bayview Avenue to Woodbine Avenue

This section of St. John’s Sideroad is currently in the detailed design phase, with this work approximately 60% complete. The Class EA was completed in August 1999 from Yonge Street to Woodbine Avenue. The recommended improvements included widening between Yonge Street and Bayview Avenue and upgrading St. John’s Sideroad to York Region standards, with left and right turn lanes being added at intersections, between Bayview Avenue and Woodbine Avenue. The construction of this work is scheduled to start in 2014 based on the draft 2011 10-Year Roads Construction Program.

Construction of a new Regional watermain along Leslie Street is well underway

York Region is presently constructing a 750 mm diameter watermain along Leslie Street from Wellington Street to Mulock Drive. The construction began in September 2010, and is scheduled for completion in fall 2011.

Consultation with Town of Aurora staff has been ongoing

Discussions with Town of Aurora staff have been ongoing since September 2009 with formal responses submitted to Town of Aurora staff on June 28, 2010 and August 30, 2010. The response letters suggested a number of potential underpasses options, identified other elements that should be considered when determining the appropriate underpass concept, and the approximate construction cost of each underpass. This information is discussed in greater details in the following sections.

At their meeting on September 13, 2010, the Council of the Town of Aurora adopted General Committee Report No. IES10-043 recommending the underpasses

Senior Regional staff attended the September 13, 2010, meeting of the Council of the Town of Aurora. During this meeting staff agreed to defer the completion of the Leslie Street Class EA Study until York Region’s Transportation Services Committee has had an opportunity to consider the Town of Aurora’s request.

4. ANALYSIS AND OPTIONS

York Region staff have completed a preliminary assessment of the pedestrian crossings of Leslie Street and St. John’s Sideroad

As part of the technical work completed on the Leslie Street Class EA and St. John’s Sideroad detailed design, a preliminary assessment of the options, benefits, impacts, constructability and costs were undertaken.
Request for Pedestrian Underpasses
Leslie Street and St. John Sideroad, Town of Aurora

Three options for grade-separated pedestrian underpass crossings were reviewed and assessed

Three options were reviewed and assessed to provide grade-separated pedestrian underpasses. These options are:

Option 1 – Combining the requested pedestrian underpass structures with already planned watercourse crossing structures.

Option 2 - Providing separate structures for the pedestrian underpasses, at the preferred crossing locations, at the elevation of the valley floor.

Option 3 – Providing separate structures for the pedestrian underpasses, at the preferred crossing locations, at an elevation just below the pavement surface.

In addition, two other options for accommodating pedestrian movements in this area were considered

Two additional options were reviewed and assessed to accommodate pedestrian movements in this area. These options are:

Option 4 – Providing grade-separated pedestrian overpass crossings. These crossing would be bridge structures over top of Leslie Street and St. John’s Sideroad.

Option 5 - Providing at-grade pedestrian crossings, at the preferred locations, completed with separate pedestrian activated signal system.

On balance, the benefits associated with Option 1 through Option 4 are relatively equal

The benefits associated with the grade-separated options, Option 1 through Option 4, are relatively equal. The common benefits of these options are:

- Grade separated options do not require pedestrians to cross the pavement.
- They may be perceived as minimizing pedestrian delays or effort of walking up and down between the elevations of the trail and the roadway, therefore encouraging more people to consider active forms of travel thereby reducing vehicle travel.
- Promote Regional initiatives of providing healthy and walkable communities, and linking green spaces.

Option 1 and Option 2 have the additional benefit of maintaining the connection for pedestrians between the trail system and the natural environment during the crossing of the Regional right-of-way. That is, pedestrians do not need to leave the natural environment area to cross the Regional right-of-way. They will continue through the right-of-way along the valley floor.
Option 5 does provide many of the same benefits as Options 1 through 4

Option 5 does provide many of the same benefits as Option 1 through Option 4. That is Option 5 promotes the Regional initiatives of healthy and walkable communities, it provides a location specific link between the green spaces on opposite sides of the roadway.

In addition, an at-grade crossing is significantly less expensive to implement and maintain, therefore increasing the ability of the Region to plan, fund, construct and operate such an option.

The incremental impacts of the Options have been assessed

The incremental impacts resulting from each of the options have been assessed at a very preliminary level of detail. These impacts are presented in Table 1.
### Table 1
Incremental Impacts of Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Incremental Environmental Effects</th>
<th>Relative Impacts</th>
<th>Relative Costs</th>
</tr>
</thead>
</table>
| 1      | Combine underpass crossings with watercourse culverts                       | • Significant grading and vegetation removal  
• Significant long-term operational, maintenance and future replacement costs  
• Significant pedestrian safety and security concerns through a long tunnel (60-80 metres) structures  
• Must be constructed as part of road improvements  
• Extremely high capital cost (over $1M per crossing) | High  | High  |
| 2      | Separate underpass crossings at the Valley floor elevation                   | • Significant grading and vegetation removal  
• Significant long-term operational, maintenance and future replacement costs  
• Significant pedestrian safety and security concerns through a long tunnel (60-80 metres) structures  
• Significant constructability issues if not constructed as part of the road improvements  
• Extremely high capital cost (over $1M per crossing) | High  | High  |
| 3      | Separate underpass crossings just below the elevation of the pavement       | • Moderate grading and vegetation removal  
• Significant long-term operational, maintenance and future replacement costs  
• Pedestrian safety and security concerns through a tunnel (40-60 metres) structures  
• Moderate constructability issues if not constructed as part of the road improvements  
• High capital cost (over $1M per crossing) | Medium | Medium |
| 4      | Overpass crossings                                                          | • Significant grading and vegetation removal required in order to construct the approach ramps - to meet AODA standard these ramps will be at least 80 metres long and would be required at both ends of each structure  
• Additional property required to accommodate structure supports and approach ramps  
• Poor aesthetics and integration between overpass structures and surrounding natural and built environments  
• Significant long-term operational, maintenance and future replacement costs  
• Significant difference in grade for pedestrians between the trail and overpass elevations  
• Moderate constructability issues if not constructed as part of the road improvements  
• Extremely high capital cost (over $1M per crossing) | High  | High  |
| 5      | At-grade crossings                                                          | • Difference in grade for pedestrians between trail and pavement elevations  
• Low long-term operations, maintenance and future replacement costs  
• Moderate capital cost ($100K-$200K per crossing) | Low  | Low  |
Building grade-separated crossings (underpass or overpass) as part of the initial road construction would be easier than retrofitting these later.

The construction of the watercourse crossing structures pose significant constructability challenges, including the length, depth relative to the roadway elevation, significant excavation requirement and traffic management during construction. Therefore, in light of these challenges, the incremental issues associated with incorporating the pedestrian crossings during construction of the road improvements are minor.

The risks of constructing in the vicinity of York Region’s 750 mm watermain would necessitate significant protection measures.

The incremental challenges associated with building the grade-separated pedestrian crossings following York Region’s road improvement projects are significant. These will include access, traffic control on a wider and busier roadway, restoration, etc.

**While Option 3 is the preferred grade-separated alternative, a preliminary estimate of the initial capital construction cost for it, is approximately $4.4M**

From the grade-separated options, Option 3 is preferred. This option has similar benefits to the other grade-separated options; however, the incremental environmental effects, relative impacts and relative costs are the lowest, of the grade-separated options.

As part of the technical analysis a preliminary estimate of the initial capital costs of the preferred grade-separated option, Option 3, concurrently with the road improvements is approximately $4.4M of which, $3.2M is for the crossings of Leslie Street and $1.2M is for the crossing of St. John’s Sideroad.

This represents the initial capital costs of constructing the structures and does not include the ancillary work of building the trail system, lighting and security measures, special requirements, if any, to satisfy *Accessibility for Ontarians with Disabilities Act (AODA)* requirements, etc. Further, in order to fully understand the total lifecycle costs of these grade-separated pedestrian crossings, a fulsome review of the long-term operation and maintenance costs should be undertaken.

It must be noted that the Region has not included the extremely high capital costs of such crossings in the 10-Year Roads Construction Program. In light of the greater environmental impacts, these options are not considered to form part of the technically-preferred solution to be advanced through the Region Class EA submission. Furthermore, it is suggested that Regional funding options not be considered further in the absence of a comprehensive policy review.
Request for Pedestrian Underpasses
Leslie Street and St. John Sideroad, Town of Aurora

Overall Option 5 is the preferred alternative for accommodating pedestrian movements and trail use in the vicinity of Leslie Street and St John's Road because it achieves the same benefit for pedestrians and cyclists and is significantly less expensive.

When considering the overall balance of impacts and benefits, Option 5 is the preferred alternative. There are Regional benefits of providing at-grade pedestrian crossings separate from the signalized intersections, as noted above. On a balance of impacts, the at-grade crossings are significantly less impact than any of the grade-separated crossings and could be accommodated within the Region's 10-Year Roads Construction Program in the future.

Further, Option 5 does have significant additional benefits over the grade-separated options, some of which include:

- Limited incremental impacts from a natural environment perspective.
- Removes the safety and security concerns with directing trail users to a tunnel structure.
- Provides better connectivity between the proposed on-road bike lanes on Leslie Street and St. John's Sideroad and the perpendicular trail system.
- Nominal incremental capital costs and operation and maintenance costs.
- Potential for York Region to fund both the capital construction and operation and maintenance costs of at-grade pedestrian crossings.
- Nominal incremental cost of constructing the at-grade crossings as a retrofit following the road improvements.

Regional staff are now moving forward to submit the Class EA for the Leslie Street improvements with the at-grade crossings forming part of the technically-preferred solution and completing the St. John's Sideroad detailed design improvements including as at-grade crossing.

As part of the technically-preferred solution for Leslie Street, at-grade pedestrian crossings will be included in the final Environmental Study Report (ESR). The ESR will document the need and justification for the pedestrian crossings and will include an analysis of the options considered and the final recommendation.

As part of the St. John’s Sideroad detailed design project, Regional staff will incorporate at-grade pedestrian crossing to accommodate future pedestrian movements in the area.
5. **FINANCIAL IMPLICATIONS**

The capital construction cost of four at-grade pedestrian crossings has been estimated to be approximately $300K.

The estimated initial capital costs of constructing four at-grade pedestrian crossings in the vicinity of Leslie Street and St. John’s Sideroad is approximately $300K; the timing of the expenditure is unknown because it is dependent on the construction of the trail system planned by the Town of Aurora.

6. **LOCAL MUNICIPAL IMPACT**

The Town of Aurora will benefit from having a connected trail system between the residential land uses west of Leslie Street with the employment land uses east of Leslie Street. Providing safe and efficient means for pedestrians and trail users to cross the Regional Roadways while using the trails will provide benefit not only to the Town of Aurora but also York Region.

7. **CONCLUSION**

Based on their safe and secure accommodation of pedestrians and cyclists and their low cost, at-grade crossings are the preferred solution for trail-user crossings of the Regional roadways and will be documented in the Environmental Study Report for York Region’s Class EA for Leslie Street from Wellington Street to Mulock Drive.

For more information on this report, please contact Mr. Paul Jankowski, General Manager, Roads at Ext. 5901.

Recommended by:  

Approved for Submission:

Kathleen Llewellyn-Thomas, P. Eng.  
Commissioner of Transportation Services  

Bruce Macgregor  
Chief Administrative Officer

January 24, 2011

Attachments - 2
Clarke, Ann

Subject: FW: Leslie St EA - Pedestrian Tunnel Cost Estimate

From: Chiu, Edward [mailto:Edward.Chiu@york.ca]
Sent: October 20, 2011 3:37 PM
To: Simanovskis, Ilmar
Subject: FW: Leslie St EA - Pedestrian Tunnel Cost Estimate

Good afternoon Ilmar,

I understand that you are looking for the estimate that was used for the pedestrian crossings on Leslie Street.

Please find the estimate provided by GENIVAR for your use. You will note that this cost is significantly higher than what was provided in our Council Report ($8M versus $3.2M).

That is because the cost identified in the Council Report is located approximately 1 m below the road elevation versus what the Town was suggested (ie., at the same elevation as the watercourse crossing). As the elevation of the underpasses is further below the road grade, the cost of the underpasses will increase due to the required length of the crossing.

Hopefully this information can be of use to you.

Edward Chiu, P.Eng.
Sr. Project Manager
Capital Delivery - Roads
Transportation Services
The Regional Municipality of York
90 Bales Dr. E.
East Gwillimbury, Ont. L0G 1V0
P#: 905-830-4444 x5908
F#: 905-836-4580
e-mail: edward.chiu@york.ca

From: Tony Fares [mailto:Tony.Fares@genivar.com]
Sent: Friday, August 06, 2010 2:08 PM
To: Chiu, Edward
Cc: Vivian Mak; Carl Woodman
Subject: RE: Leslie St EA - Pedestrian Tunnel Cost Estimate

Hi Ed,

You may assume that the design fee is 8-10% of construction cost (say $800,000).
This will include the electrical and Foundation design fees.
EA study would be a separate fee (Say $100,000).

Regards

10/25/2011
Hi Ed,

Here below the cost estimate (class D) for 3 pedestrian tunnels:

- Geo. Tech investigation: 0.15 M.
- Traffic Control: 2.50 M.
- Protection system: 0.750 M.
- Environmental protection: 0.25 M.
- Excavation (7500m^3 x $20) 0.15 M.
- Granular B (16000t x $15) 0.24 M.
- Concrete & Rebar (650m^3 x $2500) 1.63 M.
- Lighting: 0.20 M.
- Misc. 0.50 M.

Total 6.37 M x 25% (contingency) = 8 M

Regards

10/25/2011
APPENDIX "F"

Leslie Street Crossing Just South of St. John's Sideroad

Order of Magnitude Estimate (-25% to +75%)

Case 1: At Grade Crossing

<table>
<thead>
<tr>
<th>Element</th>
<th>Unit</th>
<th>Quantity</th>
<th>Cost</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Crossing (Regional Contribution)</td>
<td>LS</td>
<td>1</td>
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<td>$150,000</td>
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<tr>
<td>West trail approach from valley 3m wide</td>
<td>m</td>
<td>50</td>
<td>$140</td>
<td>$7,000</td>
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<tr>
<td>East trail approach from valley 3m wide</td>
<td>m</td>
<td>30</td>
<td>$140</td>
<td>$4,200</td>
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<td>General earth works grading and slope stabilization</td>
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<td>1</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td><strong>Total Estimate</strong></td>
<td></td>
<td></td>
<td>$171,200</td>
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</table>

Case 2: Underpass 1 m below grade

<table>
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<tr>
<th>Element</th>
<th>Unit</th>
<th>Quantity</th>
<th>Cost</th>
<th>Extension</th>
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</thead>
<tbody>
<tr>
<td>Underpass (43m per region estimate)</td>
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<td>$1,000,000</td>
<td>$1,000,000</td>
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<tr>
<td>West trail approach from valley 3m wide</td>
<td>m</td>
<td>37</td>
<td>$140</td>
<td>$5,180</td>
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<td>m</td>
<td>27</td>
<td>$140</td>
<td>$3,780</td>
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<td>General earth works grading and slope stabilization</td>
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<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>electrical supply</td>
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<tr>
<td>lighting</td>
<td>m</td>
<td>43</td>
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<td><strong>Total Estimate</strong></td>
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<td></td>
<td>$1,042,500</td>
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Case 2: Underpass 1 m below grade

<table>
<thead>
<tr>
<th>Element</th>
<th>Unit</th>
<th>Quantity</th>
<th>Cost</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underpass (60m to reach river valley)</td>
<td>m</td>
<td>80</td>
<td>$30,200</td>
<td>$1,812,000</td>
</tr>
<tr>
<td>West trail approach from valley 3m wide</td>
<td>m</td>
<td>5</td>
<td>$140</td>
<td>$700</td>
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<tr>
<td>East trail approach from valley 3m wide</td>
<td>m</td>
<td>5</td>
<td>$140</td>
<td>$700</td>
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<tr>
<td>electrical supply</td>
<td>LS</td>
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<td>$20,000</td>
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<td>lighting</td>
<td>m</td>
<td>80</td>
<td>$200</td>
<td>$12,000</td>
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<td>AODA considerations (Unknown at this time)</td>
<td>LS</td>
<td>1</td>
<td>$5,000</td>
<td>$5,000</td>
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<tr>
<td><strong>Total Estimate</strong></td>
<td></td>
<td></td>
<td>$1,850,400</td>
<td></td>
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</tbody>
</table>

30% increase to account for increased surcharge
APPENDIX “G”

POLICY STATEMENT:
This policy allows York Region to provide up to 50% funding to local municipalities and stakeholder groups for qualifying pedestrian and cycling infrastructure that support a regional scale network.

APPLICATION:
By approving a fixed budget each year and by providing an evaluation strategy for qualifying and ranking applications, this policy shall be used to provide funding to local municipalities and stakeholder groups for the qualifying pedestrian and cycling infrastructure.

PURPOSE:
The purpose of this policy is to allow York Region to participate in the construction of qualifying local municipal and stakeholder group pedestrian and cycling infrastructure that serve a regional context. The application process can be found in the Program guidelines in Appendix A.

DEFINITIONS:

Pedestrian and Cycling Municipal Partnership Policy — York Region’s technical guideline for the evaluation of pedestrian and cycling infrastructure applications from the local municipalities and stakeholder groups for York Region funding contribution.

DESCRIPTION:
Firstly, on a yearly basis York Region will approve a fixed amount of funding to be provided for Pedestrian and Cycling Partnership projects.

In a typical scenario, local municipality and/or stakeholder group will complete a design study for the proposed project. The municipality and/or stakeholder group must commit a minimum of 50% of the funding, but will be seeking financial assistance for the initiative.

The local municipality and/or stakeholder group prepares an application to York Region’s ‘Pedestrian and Cycling Municipal Partnership Program’ and submits the application by the established deadline.
Municipal Pedestrian and Cycling Partnership Policy

Upon receipt of the pedestrian and cycling partnership application, the York Region Pedestrian and Cycling Review Team evaluates each application to determine the level of Regional funding contribution in accordance with criteria outlined in the Municipal Partnership guidelines and recommends qualifying applications for funding to Regional Council.

Any unallocated funds from the Municipal Partnership Program will be carried forward year to year.

RESPONSIBILITIES:
The Pedestrian and Cycling Review Team will be created in order to take on the role of reviewing and scoring all applications. The team will be made up of the following personnel:
- Manager, Transportation Planning
- Cycling Program Coordinator
- Director, Roads Capital Delivery
- Manager Service Planning, Transit
- Manager, Long Range Planning
- Manager, Health Department

The team may also include representatives for the affected local municipalities as needed.

REFERENCE:
Draft Approval (Regional Council Report #, Clause #, DATE)

CONTACT:
Director, Infrastructure Planning – Planning and Development Services Department

<table>
<thead>
<tr>
<th>APPROVAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAO Approval Date:</td>
</tr>
<tr>
<td>Committee: Clause: Report No:</td>
</tr>
<tr>
<td>Council Approval: Minute No. Page: Date:</td>
</tr>
</tbody>
</table>
1. Background:
The purpose of the Pedestrian and Cycling Municipal Partnerships Program is to encourage walking and cycling by accelerating the development of pedestrian and cycling infrastructure throughout York Region. Walking and Cycling for transportation purposes (work, school and errands) reduces the number of trips made by motor vehicles and contributes to the reduction of traffic and greenhouse gas (GHG) emissions, thereby improving the quality of life for York Region residents.

2. Funding:
This capital cost-sharing program is administered and funded by the York Region. The Region will contribute up to 50% of the construction cost of a project under this program. The partnership program is funded in the amount of $250,000 per year and will be based on approved submissions for a particular budget year. The amount of project funding will be based on the policy adopted by Council. No approval will be granted for work already done, as the intent of the Program is to expand municipal pedestrian and cycling infrastructure. If a third party, including another agency, is contributing to a project, that contribution must be deducted from the project's total eligible cost and the Program share calculated on the balance.

Projects approved under the Program must adhere to the design and route submitted to receive funding. Changes proposed after a contribution agreement is signed must be approved by the Region prior to construction, although approval is not guaranteed.

Any unallocated funds from the Municipal Partnership Program will be carried forward year to year.

3. Eligible Projects:
The Region will only provide financial assistance for infrastructure which forms part of a network plan prepared and adopted by a municipality and/or agency (i.e., Conservation authorities, trail associations, etc.).

Plans that have been adopted by a local government, or which will be incorporated into the next update of the official community plan, will be accepted as a network plan.
Municipal Pedestrian and Cycling Partnership Policy

In order for a project to be eligible, design work and public consultation must be completed prior to application, with the project “shelf ready” for construction.

Eligible projects include those that encourage commuter walking and cycling through the development of infrastructure that supports a Regional scale network.

The following criteria must all be met in order for the proposed project to be considered for partnership funding. The project must:

- Support a Regional scale network.
- Support the objectives and policies of the Region.
- Be supported by a resolution of local council.
- Accompanied by a design study.
- Accompanied by a commitment from the local municipalities and agency for:
  - 50% or more of the capital cost of construction.
  - All maintenance and rehabilitation responsibilities.

4. Eligible Costs:
The Partnership Program will assist local municipalities and key stakeholder groups in expanding their network by funding up to 50% of eligible capital work. The Program share is calculated from the total capital cost of the project net of all third party contributions.

Regional staff will evaluate each project on the basis of the identified technical criteria to determine the percentage of Program funding. A list of recommended projects would then be presented to Regional Council for approval.

Eligible proposals include, but are not limited to, projects that:

- Are supportive of commuter walking or cycling.
- Are on-road or off-road facilities for public use under the jurisdiction of local municipalities, conservation authorities or other stakeholders that serve a Regional context.
- Provide linkages to multi-modal facilities.
- Help reduce traffic congestion on a Regional road.
- Connect neighbouring municipalities.
- Remove barriers (e.g. crossing of a Regional road) and enhances the overall experience of the user.
- Are part of an adopted network plan.
- Provide a safe walking/cycling environment.
- Are for public use.
- Are new projects.
- Are ready for construction.

Non-eligible proposals include, but are not limited to, projects that:

- Emphasize localized recreational cycling/walking.
- Already have full funding commitment from other sources.

Typical eligible items are labour and material costs for:

- Pavement Material
- Signage
- Safety Barriers
- Hard Landscaping
Municipal Pedestrian and Cycling Partnership Policy

- Lighting (as per Regional policy)
- Bridge Structures
- Utility Relocation
- Traffic Control
- Project Management.

Project elements not eligible for Regional funding include:
- Property acquisition
- Administration / overhead
- Design and planning
- Landscaping
- Maintenance works
- New curb & gutter (unless necessitated by project design)
- New sidewalks (unless necessitated by project design)
- Interlocking pavers
- End of trip facilities that are not part of the construction project (i.e. bike racks, lockers, etc.).

5. Project Selection:
Proposals are selected using a priority ranking system to determine which applications best meet the Program's goal of encouraging commuter walking and cycling, reducing traffic congestion and that support a Regional context. Each application is given a score and in cases where funding is not available for all applications submitted in a budget year, the applications scoring the highest would be recommended for the upcoming year's funding.

The higher the leveraging of Program funding, the higher will be the priority ranking in the selection process. Hence, projects requiring more proportional share of Program funding will be given a sliding score in the priority ranking in the selection process.

Funding for projects is awarded based on the following:
- Number of Regional objectives met
- Cost effectiveness
- Scale/overall plan and phasing
- Safety
- Potential usage
- Construction timing
- Connections/linkages
- Remove barriers
- Attractiveness of the project.

6. Application Package:
Applications submitted under the MPP must include the following materials:
- Rationale for the route and the long term goals and objectives of the project (see Project Description on the application form)
- Network plan
- Fully completed application form including:
  - Evidence that public consultation is complete and that issues have been addressed
  - Copies of all necessary permits
  - Cost estimates and listing of works to be undertaken
Municipal Pedestrian and Cycling Partnership Policy

- Regional approval, if applicable
- Detailed description of design and works to be completed.
  - A typical cross-section drawing
  - Detailed design drawings.
- Warrants for traffic signals - the following information (stamped by a P. Eng. or certified by the municipal clerk that the information is correct) must be attached for the main and cross street where each signal is proposed:
  - Traffic signal warrant sheet
  - Pedestrian signal warrant sheet
- Map detailing the following:
  - Existing network and proposed routes
  - Existing road network
  - Location of trip generators such as town centres, recreation facilities and schools
  - Municipal boundaries and portions of neighbouring municipalities
- Additional material may include:
  - Letter(s) of endorsement from local pedestrian and cycling groups, schools, major employers, etc.
  - Colour photographs of the project site

7. Submission Deadline:

Local municipalities and stakeholders must make an application for Program funding via the Pedestrian and Cycling Municipal Partnership application form. For 2007 and 2008 funding allocation, interested parties must submit an application by August 1, 2007 for projects to be considered for the 2007 and 2008 construction seasons.

As a standard procedure starting in 2008 for budget allocation for 2009 and beyond, interested partners must adhere to the following timelines to qualify for Regional funding contribution.

March 31 Receipt of Qualified Proposal and Draft Cost Estimate
The submission of an application is required by March 31 of each year where the application will be screened for eligibility.

September 01 Finalized Design and Cost Estimate
By September 1st of the same year, applicants will be required to submit a complete design study for Regional review as well as a detailed cost breakdown of the project.

November 01 Budget Submission
As per the submitted and agreed upon project cost estimate, budget submissions for the successful applications for each year will be forwarded to Council recommending the Region’s contribution to the projects for approval.

January / February Budget Approved - Funds Available
When the Regional Roads Capital Budget is approved, Program funding will then be committed for the construction works associated with the successful applications.
Municipal Pedestrian and Cycling Partnership Policy

Please send application packages, or direct questions to:

Rosa Ruffolo
TDM Coordinator
Planning and Development Services Department
Regional Municipality of York
17250 Yonge Street
Newmarket, Ontario
L3Y 6Z1
Rosa.Ruffolo@york.ca
Phone: 1-877-464-9675x5061
Fax: 905-895-0191
7. Adoption of Items Not Requiring Separate Discussion

Items 1 (with the exception of sub-items 3 and 11) and 2 were identified as items not requiring separate discussion.

Moved by Councillor Pirri  
Seconded by Councillor Thom  

That the following recommendations with respect to the matters listed as “Items Not Requiring Separate Discussion” be adopted as submitted to Council and staff be authorized to take all necessary action required to give effect to same:


That the General Committee meeting report of October 4, 2016, be received and the following recommendations carried by the Committee be approved:

(14) Trails and Active Transportation Committee Meeting Minutes of September 16, 2016

1. That the Trails and Active Transportation Committee meeting minutes of September 16, 2016, be received; and

1. Memorandum from Manager of Parks  
Re: Atkinson Park Trail Extension to St. John’s Sideroad

1. That staff be directed to investigate the cost of the proposed Atkinson Park trail extension, consult with Lake Simcoe Region Conservation Authority and York Region, and report back to the Trails and Active Transportation Committee for consideration.

2. Memorandum from Manager of Parks  
Re: Lake to Lake Trail Update

1. That the draft plan of the proposed Lake to Lake Cycling Route and Walking Trail be publicly communicated.

Carried