

## Minutes of Meeting

**Date:** February 19, 2016 (revised March 15, 2016)  
**File #:** TP115085-75  
**Meeting Date & Time:** January 21, 2016  
**Meeting at:** Region of Peel, Conference Room  
**Subject:** Mississauga Road Class Environmental Assessment  
 Kick-Off Meeting – Workshop Summary

### Attendees:

Antonietta Minichillo, City of Brampton	Jim Washburn, Region of Peel
Daniel Waters, City of Brampton	Liz Brock, Region of Peel
Craig Sherwood, Brampton Transit	Lorenzo Mele, Region of Peel
Chris Lafleur, Brampton Transit	Anthony Zois, Region of Peel
Rebecca Stewart, CVC	Lori-Ann Thomsen, Region of Peel
Jakub Killis, CVC	Nathan Sinka, Region of Peel
Liam Marray, CVC	Bob Nieuwenhuysen, Region of Peel
Steve Ganesh, Region of Peel	Boguslaw Lipka, Region of Peel
Gary Kocialek, Region of Peel	Sally Rook, Region of Peel
John Kolb, Region of Peel	Sargon Sifo, Region of Peel
Kathryn Dewar, Region of Peel	Gene Chartier, Paradigm
Natalie Lapos, Region of Peel	David Sinke, Amec Foster Wheeler
Arthur Lo, Region of Peel	Jason Stahl, Amec Foster Wheeler
Kim McAdam, Region of Peel	Steve Chipps, Amec Foster Wheeler
Seema Ansari, Region of Peel	Mary Kelly, Amec Foster Wheeler
Sarah Powell, Region of Peel	Heather Dearlove, Amec Foster Wheeler
Jibril Farah, Region of Peel	

### MATTERS DISCUSSED

### ACTION BY:

#### Location 1:

#### *Natural Environment:*

1. Credit River Trail
  - o The CVC, City of Mississauga, City of Brampton, Town of Caledon, and Town of Orangeville is undertaking this initiative
  - o Initial plans are to follow the Credit River as close as possible which will require a crossing of Mississauga Road (above or below structure – prefer no crosswalks)

**PLEASE NOTE:** If there is any comment or amendment to be made to these meeting notes, they should be brought to the notice of Amec Foster Wheeler within 24 hours of issue and confirmed in writing

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**MATTERS DISCUSSED**

**ACTION BY:**

- Currently in the initial design stages and preliminary discussion with property owners
- 2. Maple Trees
  - Located on the east side of Mississauga Road at the top of the Credit Valley slope
  - Identified in the 2002 Class EA and subsequent addendum
  - Particularly important to the Huttonville Community
- 3. Huttonville Valley Environmental Sensitive Area (ESA)
  - Limited potential for development within the ESA
- 4. Provincially Significant Wetland (PSW) and ANSI located adjacent to the Lionhead Golf and Country Club
  - No development is permitted within PSW
- 5. Credit River
  - Large floodplain
  - Mississauga Road is overtopped during regional storm event (+/- 2m water depth)
  - A fluvial geomorphic investigation will be required to determine potential sensitive areas and restrictions
- 6. Shale Reserve
  - In place until December 31, 2016
- 7. Low Impact Development (LID)
  - Currently limited to median planters and other landscaping features
  - CVC is keen on promoting initiative, however does not require LID be implemented
- 8. Groundwater
  - Issues were identified south of Embleton Road

**Amec FW**

***Heritage/Archaeology:***

- 9. Heritage Heights Planning Study
  - This study included an assessment of all heritage elements in the immediate vicinity of the Heritage Heights planning area
  - A review of the planning study document as it relates to the heritage resources should be completed by the Class EA team
- 10. River Road
  - Identified as a Cultural Heritage Landscape
- 11. Embleton Road
  - Many properties are listed as heritage resources
- 12. McMurchy Woolen Mills and Powerhouse

**AmecFW**

**MATTERS DISCUSSED**

**ACTION BY:**

- Property and outbuildings are designated as a significant heritage property
- 13. Credit River
  - All areas around the Credit River have high archaeological potential
- 14. Other Heritage properties within the study area
  - Visit the City of Brampton website for more information

**AmecFW**

**Development:**

- 15. Draft plans of subdivision
  - A development located across from the Lionhead Golf and Country Club entrance is currently under review – approximately 100 single units/61 townhouse units
- 16. Lionhead Golf Course is reviewing options for residential development on property
- 17. Block 40-3 is under review
- 18. Is there capacity in the existing and/or proposed storm ponds for water from Regional Roads?

**Amec FW**

**Amec FW /  
Region**

**Existing Road Issues:**

- 19. 1400mm x 875mm CSP Arch
  - 675m south of Credit River
  - Should be reviewed for potential impacts
- 20. Transit currently limited along corridor and there are no future plans to expand
- 21. Zum is being planned along Queen Street and Bovaird Drive for 2016
- 22. River Road
  - The southbound right-turn lane on Mississauga Road appears to continue through the intersection but ends in a bus lane, which has confused road users
  - The rumble strips located on River Road is an issue for road maintenance and numerous complaints by residents about the noise of the strips
- 23. Issue with the manholes covers lifting on the hill approaching the Credit River crossing
- 24. Planter boxes in the median
  - Requires lane closures to maintain
  - Limited vegetation grows in the existing planter boxes

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**Amec FW**

**Region**

**MATTERS DISCUSSED**

**ACTION BY:**

- Various LID techniques have been investigated at this location but nothing has been approved

25. The multi-use trail system is discontinuous along the corridor

**Study Considerations:**

- |   |  |
|---|--|
| 26. Confirm recommendations made by the Road Characterization Study for the study area  | <b>Amec FW /<br/>Paradigm</b>              |
| 27. Consider reduced lane widths and reduced median widths  | <b>Amec FW /<br/>Paradigm</b>              |
| 28. Avoid trees on west side  |  |
| 29. A large mall will be located on Mississauga Road north of Bovaird Drive, which could impact traffic volumes   | <b>Amec FW /<br/>Paradigm</b>              |
| 30. Consider a minimum 2m setback from curb to multi-use trail/sidewalks  | <b>Amec FW</b>                             |
| 31. Will the entrance to the 'Terrace on the Green' require reconfiguration?  | <b>Amec FW</b>                             |
| 32. Harmonize speed limits through study corridor <ul style="list-style-type: none"><li>○ Will the speed limit remain in this section of Mississauga Road? What is the appropriate speed limit for the area?</li></ul>  | <b>Amec FW /<br/>Paradigm /<br/>Region</b> |
| 33. Credit River Structure <ul style="list-style-type: none"><li>○ Is 6 lanes required over the structure?</li><li>○ Only AM and PM peak congested?</li><li>○ Can another corridor be improved to alleviate traffic on Mississauga Road?</li></ul>                                  | <b>Amec FW /<br/>Paradigm</b>              |
| 34. Mississauga Road is a truck route <ul style="list-style-type: none"><li>○ Used to service the Caledon area</li><li>○ Are there other arterial roads that can be used to reduce truck traffic?</li><li>○ Can time restrictions be implemented to reduce truck traffic?</li></ul> | <b>Amec FW /<br/>Region</b>                |
| 35. Need to investigate methods to increase the use of ZUM transit  | <b>Region</b>                              |
| 36. Active Transportation Master Plan <ul style="list-style-type: none"><li>○ Adopted by Council for alternative and healthy living</li><li>○ Opportunity to support Active Transportation components of Master Plan</li></ul>  |  |
| 37. Opportunity to advance Gateways to Brampton Initiative at Queen Street.   | <b>Amec FW</b>                             |

**MATTERS DISCUSSED**

**ACTION BY:**

38. Utility servicing
- Is there an opportunity to implement a utility corridor – a dedicated area in the boulevard in which utilities could be located (2-3 m strip)?
  - Rogers will need to grow network to support development along corridor
  - Currently using aerial through the use of hydro poles but is becoming increasingly more difficult
  - The Mississauga Road corridor may become a fiber optic spine
39. Emphasize the importance of reducing vehicular traffic through other means
40. Concerned with residential access to individual properties if road is widened
41. The properties on Embleton Road are on septic. Is there an opportunity to construct a sanitary sewer?
42. Embleton Road will be transferred to the City of Brampton
43. Region of Peel owns three properties along Mississauga Road, south of Embleton Road
44. Consideration for Navigable Water Act restrictions
45. Active transportation facilities
- Separate structure for pedestrians?
  - Consider something similar to the pedestrian structure in downtown Bolton over the Humber River
46. Confirm SWM criteria
- Expected to achieve quality/quantity control, erosion control, 80% TSS and flood control.
47. Heritage Road widening may relieve some traffic congestion on Mississauga Road
48. B. Nieuwenhuysen requested further analysis of the operational implications of retaining the existing four-lane bridge crossing over the Credit River if the adjoining sections of Mississauga Road were widened to six lanes. Paradigm to complete a traffic microsimulation analysis from Queen Street to Embleton Road for the future scenarios.

**Amec FW**

**Region**

**Amec FW /  
Region**

**AmecFW /  
Paradigm**

**AmecFW /  
Paradigm**

**MATTERS DISCUSSED**

**ACTION BY:**

**Location 2:**

**Natural Environment:**

1. Redside Dace have been found within the Huttonville Creek Tributary
2. Huttonville Creek is located on the east side, and parallels Mississauga Road for approximately 500m

**Heritage/Archaeology:**

3. Pioneer Cemetery located on the east side of Mississauga Road is a designated property
4. Heritage property located at Bovaird Drive and Williams Parkway
5. See full list of heritage properties on the City of Brampton website

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**Development:**

6. House at 9330 Mississauga Road to be demolished
7. Site plan applications for Four X Development

**Amec  
FW/Region**

**Existing Road issues:**

8. Incorporate LID north of Queen Street
9. LID pilot projects located along corridor and should be incorporated into 6-lane widening
10. Planter boxes in the median
  - o Requires lane closures to maintain
  - o Limited vegetation grows in this location and the planter boxes are hard to maintain
11. High school located on Bovaird Drive may require a midblock crossing of Mississauga Road
12. Extensive retaining wall on east side of Mississauga Road, south of Bovaird Drive to be maintained
13. There is a man-made pond south of Bovaird Drive on the west side. The pond is currently being used for irrigation of the nearby driving range. The owners have entered into an encroachment agreement for the pond as it encroaches on the Mississauga Road and Bovaird Drive right-of-way.

**Amec FW**

**Amec FW /  
Region**

**Study Considerations:**

Continued...

Meeting Date: January 21, 2016

## **MATTERS DISCUSSED**

## **ACTION BY:**

- |  |  |
|--|--|
| 14. Existing pond on the east side of Mississauga Road just north of Queen Street may not have sufficient capacity to accept drainage from the road                                    | <b>Amec FW</b>                             |
| 15. Consider a minimum 2m setback from curb to multi-use trail/sidewalks   | <b>Amec FW</b>                             |
| 16. How do you transfer traffic numbers and widening to a cost/benefit analysis? How is widening determined to be the most cost effective method for improving traffic?                | <b>Amec FW /<br/>Paradigm /<br/>Region</b> |
| 17. Is there an opportunity to create a consistent urban cross section? For the upcoming 4-lane widening, the west side will remain rural and east side will be an urban cross section | <b>Amec FW /<br/>Paradigm /<br/>Region</b> |
| 18. LID initiatives are being planned for east side of Mississauga Road from Williams Parkway to Bovaird Drive. Is there an opportunity to maintain and enhance feature?               | <b>Amec FW /<br/>Region</b>                |
| 19. Is there an opportunity for enhanced streetscaping initiatives along west side of Mississauga Road?  | <b>Amec FW /<br/>Region</b>                |
| 20. Encroachment agreement adjacent to Petro Canada (SW corner of Mississauga Road and Bovaird Drive) may be required.   | <b>Amec FW</b>                             |

### ***List of Top Opportunities and Constraints:***

#### ***Location 1:***

1. Credit River Structure
  - o Cantilever design that would allow a separate pedestrian structure
  - o Is it possible to maintain 4 lanes on bridge while maintaining functionality of the roadway?
2. Provincially Significant Wetland (PSW)
3. Maintenance issues
  - o Manholes, median planter boxes
4. Numerous heritage designated properties along corridor
5. Existing utilities
6. Future Credit River Trail
7. Grading constraints (particularly near Credit River)
8. Gateway to the City of Brampton features
9. Maintenance of access to private properties

Continued...

Meeting Date: January 21, 2016

**MATTERS DISCUSSED**

**ACTION BY:**

10. Public fatigue – numerous on-going projects in the corridor and within the surrounding area
11. Improve connectivity to surrounding trails

**Location 2:**

1. Queen Street – maintain current lane configuration for north leg of intersection
2. Stormwater Management
  - o Utilize SWM pond on NE corner of Mississauga Road and Queen Street?
3. Pioneer Cemetery
4. Development along west side of Mississauga Road
5. Huttonville Creek
  - o Redside Dace habitat and potential stormwater management constraints
6. Future mall north of Bovaird Drive on the west side of Mississauga Road
7. Existing utilities
8. Potential to harmonize speed limits along corridor
9. Maintain and enhance LID features and opportunities
10. Improvement to streetscaping
11. Heritage structures

Meeting Minutes prepared by,

Amec Foster Wheeler Environment & Infrastructure  
A Division of Amec Foster Wheeler Americas Limited



Per: Heather Dearlove, B.Sc.  
Environmental Planner

HD/kf





amec  
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wheeler

## Minutes of Meeting

**Date:** March 30, 2016  
**File #:** TP115085  
**Meeting Date & Time:** March 4, 2016  
**Meeting at:** Region Offices, 10 Peel Centre Drive, Suite 'B', 4<sup>th</sup> Floor, Room 641  
**Subject:** Mississauga Road Class Environmental Assessment Meeting with MNR and CVC

### Attendees:

Rebecca Stewart, CVC  
Jakub Kilis, CVC  
Mark Heaton, MNR  
Neal Smith, Region of Peel  
Sargon Sifo, Region of Peel  
Liz Brock, Region of Peel

David Sinke, Amec Foster Wheeler  
Daryl Rideout, Amec Foster Wheeler  
Brittany Ferguson, Amec Foster Wheeler  
Jason Stahl, Amec Foster Wheeler  
Steve Chipps, Amec Foster Wheeler

### MATTERS DISCUSSED

### ACTION BY:

#### Background Summary

1. The following two projects have been initiated:
  - a. Location 1 – Schedule 'C' Class EA for Mississauga Road from Financial Drive to Queen Street West
  - b. Location 2 – Addendum for the Class EA completed in 2006 for Mississauga Road from Queen Street West to Bovaird Drive
2. The project team had recently met with other agencies (City of Brampton, Brampton Transit, CVC, etc.) for a group kick-off meeting. The goal was to create a collective vision for the future of Mississauga Road.

#### Need and Justification for Improvements

3. The following technical studies will be completed for the study area:
  - a. Transportation and Traffic Study;
  - b. Natural Environment Assessment Report;
  - c. Drainage and Stormwater Management;
  - d. Culvert and Structural Analysis;
  - e. Fluvial Geomorphology Assessment;

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**MATTERS DISCUSSED**

**ACTION BY:**

- f. Hydrogeological Investigations;
  - g. Stage 1 Archaeology Assessment;
  - h. Cultural and Built Heritage;
  - i. Geotechnical Investigations;
  - j. Noise Impact Studies;
  - k. Air Quality Assessment, and
  - l. Landscaping/Streetscaping Assessment.
4. Amec FW noted that the Transportation and Traffic Study is nearing completion. Preliminary results indicate that Mississauga Road is currently under capacity, and six lanes will be necessary to service the forecasted traffic volumes.

**Issues/Constraints and Opportunities**

5. MNRF identified the following regarding Location 1:
- a. Mississauga Road crosses the Huttonville Valley ESA, a Provincially Significant Wetland (PSW), and an ANSI.
  - b. The coldwater channel crossing Mississauga Road just south of the Credit River structure is an important component of the PSW.
  - c. There is a sand deposit along the top of the valley, which provides an opportunity to use Low-Impact Development (LID) techniques.
  - d. There is an opportunity to reinstate an access to the Credit River off Mississauga Road, for use by the MNRF as a fish restocking location.
6. A portion of the discussion focused on the Credit River Crossing between Embelton Road and Queen Street. The following was discussed:
- a. Widening of the existing crossing may be required to accommodate the projected traffic demands.
  - b. To maximize the space available on the existing crossing, the study team is considering removing pedestrians from the structure and directing them towards a new pedestrian crossing of the Credit River.
  - c. Widening of the existing crossing has implications on the floodplain modelling, which will need to be explored by the study team.
  - d. Traffic lanes widths will be reviewed. The corridor is identified as a goods movement route by the Region, so the outside lane should consider large truck movement.
  - e. 'Vista viewing' should be considered if the existing crossing is modified.
  - f. The pedestrian bridge (if pursued) should match the configuration of other pedestrian crossings within CVC's jurisdiction (ex. Pedestrian crossing behind CVC's office).

**MATTERS DISCUSSED**

**ACTION BY:**

- g. Implementation of signage identifying fishing regulations for the Credit River.
- 7. MNRF identified the following for Location 2:
  - a. Integration with the Four X development SWM pond and the existing SWM pond on the northeast corner of Mississauga Road and Queen Street.
  - b. Potential for LID measures to reduce the need to rely on developer controlled SWM ponds.
  - c. Maintain east limit of Mississauga Road along Huttonville Creek.

**Schedule**

- 8. PIC #1 is anticipated to be completed in September 2016.
- 9. A meeting with CVC/MNRF will be completed prior to the PIC to review the outcome of the technical assessments and planning alternative assessment.

Meeting Minutes prepared by,

Amec Foster Wheeler Environment & Infrastructure  
A Division of Amec Foster Wheeler Americas Limited



Per: Jason Stahl, P. Eng.  
Project Engineer

JS/

# Minutes

**Date:** November 2<sup>nd</sup>, 2016  
**File #:** TP115085  
**Meeting Date & Time:** October 11<sup>th</sup>, 2016  
**Meeting at:** Region of Peel Head Office, 4<sup>th</sup> Floor, Room 830  
**Subject:** Mississauga Road Class EA  
Progress Meeting with CVC and MNRF

**Attendees:**

Mark Heaton – MNRF  
Jakub Kilis – CVC  
Rebecca Stewart - CVC

Jason Stahl – Amec Foster Wheeler  
Heather Dearlove – Amec Foster Wheeler  
John Nemeth – Region of Peel

## MATTERS DISCUSSED

## ACTION BY:

### Introduction

- 1) The purpose of the meeting was to update the CVC and MNRF on the progress of the Mississauga Road Class EA (Location 1 from Financial Drive to Queen Street) and Addendum (Location 2 from Queen Street to Bovaird Drive)

### Update on Technical Studies

- 2) An update on the Technical Studies was provided by Amec FW. The following was noted:
  - a) Traffic Report – The traffic projection model has forecast approx. 4000 vehicles to cross through the study area during both the AM and PM peak hour. Given the large amount of through traffic, 6 lanes is required. The possibility of maintaining 4 lanes over the Credit River crossing with the approaches widened to 6 lanes was modelled. The analysis indicated that the performance of Mississauga Road would significantly deteriorate if the current cross section over the Credit River is maintained.
  - b) Natural Environment – The field work was completed recently. No additional environmental constraints were identified.
  - c) Drainage and Stormwater Management – The existing conditions model has been drafted.
  - d) Fluvial Geomorphology – Field work was recently completed.
  - e) Hydrogeology – Deferred to completion of the geotech report.

**PLEASE NOTE:** If there is any comment or amendment to be made to these meeting notes, they should be brought to the notice of Amec Foster Wheeler within five (5) business days of issue and confirmed in writing.

## **MATTERS DISCUSSED**

**ACTION BY:**

- f) Stage 1 Archaeological Assessment – Completed. A Stage 2 is recommended for some areas.
- g) Built Heritage and Cultural Landscape Assessment – Completed. A number of cultural and built heritage locations were identified.
- h) Geotechnical Investigation – Deferred to completion of the preliminary design.
- i) Noise – Deferred to completion of the preliminary design.
- j) Air Quality – Deferred to completion of the preliminary design.
- k) Landscaping and Streetscaping – Deferred to completion of the preliminary design.

### **Review of Constraints and Opportunities**

- 3) CVC noted that floodline modelling will be an important consideration for this study – particularly at the crossing of the Credit River.
- 4) MNRF reiterated that the soils in the area are more conducive to LID infrastructure. Amec FW to consider LID as part of the SWM portion of the study. **AFW**
- 5) The Region noted that outlet to the Four X development SWM facility is not preferred. Alternate methods to provide quantity, quality, and erosion control need to be considered.
- 6) A number of constraints and opportunities were identified for the crossing of the Credit River by all in attendance:
  - a) The majority of Mississauga Road as it passes through Huttonville is contained within a floodplain. Opportunity to raise the road out of the floodplain should be explored.
  - b) Try to focus any road widening away from the Credit River.
  - c) Avoid fill in wetland and ESA areas. Ensure limits are documented within the assessment.
  - d) Explore opportunities to improve conveyance at the crossing (existing crossing is overtopped during Regional Storm).
  - e) Consider using piers along embankment of Credit River to avoid placement of fill.
  - f) Avoid land purchase at crossing.

### **Review of Planning Alternatives**

- 7) A preliminary list of planning alternatives was reviewed by all. The following was proposed:
  - a) Do Nothing
  - b) Improve Other Roads
  - c) Transit Infrastructure Improvements
  - d) Travel Demand Management
  - e) Widen Mississauga Road
  - f) Combination of c) d) and e)

Continued...  
Meeting Date: October 11<sup>th</sup>, 2016

**MATTERS DISCUSSED**

**ACTION BY:**

- 8) CVC requested that the team consider a 'middle' alternative to bridge the gap between the options provided.

**Schedule**

- 9) The project is moving towards a TAC meeting on November 8<sup>th</sup>. PIC #1 will be scheduled for a later date in early 2017.

- 10) CVC requested that the technical studies be provided prior to the TAC meeting.

**Amec FW**

Meeting Minutes prepared by:

Amec Foster Wheeler Environment & Infrastructure  
A division of Amec Foster Wheeler Americas Limited



Per: Jason Stahl, P. Eng.  
Project Engineer

JS



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## Minutes of Meeting

**Date:** December 1, 2016  
**File #:** TP115085  
**Meeting Date & Time:** November 8, 2016  
**Meeting at:** Region of Peel, Conference Room  
**Subject:** Mississauga Road Class Environmental Assessment  
Technical Agency Committee Meeting No.1

### Attendees:

Neal Smith, Region of Peel	Anthony Zois, Region of Peel
Asha Saddi, Region of Peel	Nathan Sinka, Region of Peel
Chris Lafleur, Brampton Transit	Bob Nieuwenhuysen, Region of Peel
Kaitlyn McGlade, CVC	Sally Rook, Region of Peel
Rebecca Stewart, CVC	Sargon Sifo, Region of Peel
Jakub Kilis, CVC	Gene Chartier, Paradigm
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Jibril Farah, Region of Peel	Daryl Rideout, Amec Foster Wheeler
Kathlyn Dewar, Region of Peel	Heather Dearlove, Amec Foster Wheeler
Inderjit Hans, City of Brampton	

### MATTERS DISCUSSED

### ACTION BY:

**Note: Copy of the presentation and preliminary design for location 2 has been attached for your reference.**

The following is a summary of the comments and questions asked during the presentation:

1. How was future traffic calculated? The future traffic numbers included the following:
  - o Data was compiled from the Region's transportation model and the City of Brampton's TTMP;
  - o Does not include the GTA West numbers;
  - o Factored in the expansion of the BramWest Parkway, and
  - o Anticipated improvements to parallel roads.
2. Does Brampton have any intention on expanding ZUM transit services along the Mississauga Road corridor? Currently, ZUM Transit services

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**MATTERS DISCUSSED**

**ACTION BY:**

extend from Bovaird Drive to Queen Street. Mississauga Road from Queen Street to Financial Drive will be a support corridor and it is not anticipated to have ZUM services.

3. CVC noted that in Location 2 (addendum section) offset protection is already provided adjacent to the creek that runs parallel to Mississauga Road. A slope retention structure was constructed recently and it was understood that there would be no further work on the embankment. The developer has provided offset protection and will be incorporated into the design for the widening of Location 2.
4. MNRFB requested clarification if there would be changes to the storm sewer discharge to the Credit River that is located south of the Credit River structure. Changes may be required in order to service the potential widening of Mississauga Road. However, the exact scope of changes (if any) cannot be confirmed until the specifics of the preferred design alternative is confirmed.
5. MNRFB requested that there be consideration to allow for access to the Credit River north of the Credit River structure to facilitate fish restocking. Amec FW will review the potential for an access as part of subsequent phases of the Class EA process.
6. The MNRFB requested that an access to the Credit River be considered to allow boat launching with parking similar to what is provided in Norval at Bovaird Drive/Heritage Road. Amec FW will review potential for this as part of subsequent phases of the Class EA process.
7. The Region noted that there may be additional archaeological assessments completed for the Four X Development lands and those findings should be incorporated into the assessment for Location 2. This area is currently being developed and under construction. Amec FW to review further and confirm if additional archaeological assessments are required adjacent to the Four X Development area.
8. The Region commented that additional geotechnical investigation may be required adjacent to the Credit River structure to confirm the ability of the footings / soil to support additional loading on the structure. Amec FW agreed with the need for additional boreholes and will explore the possibility as part of the geotechnical study to be completed later in the Class EA process.
9. The potential for a new structure at the Credit River Crossing was discussed including the option for a separate pedestrian crossing. If full replacement is pursued, the wider structure could accommodate the trail being proposed by CVC. CVC commented that the location of the trail is still conceptual and should not be factored into the assessment of



Continued...

Meeting Date: November 8, 2016

## **MATTERS DISCUSSED**

**ACTION BY:**

alternatives. All options for the structure are being investigated and the assessment will take into consideration all of the identified constraints at the crossing.

10. Copies the planning alternative assessment table with written explanation was requested by several attendees. Amec Foster Wheeler to review and provide with the meeting minutes.
11. It was noted the stormwater management assessment should confirm if the stormwater management ponds is sufficient to accommodate the runoff from the proposed widening. Also, the assessment should consider implementation of LID BMP's as much as possible.

### **The following is a summary of the comments from the Group Discussion:**

12. Some operational concerns were identified at the intersection of Mississauga Road and Queen Street West, as follows:
  - o Signage for the southbound curb lane needs to be reviewed. It is not clear that the curb lane transitions to a right turn lane as vehicles approach the intersection
  - o The sight lines for the northbound left turn lane at the intersection of Mississauga Road with Queen Street West should be reviewed.
13. The MNRF identified the sand lens north of Williams Parkway, which would be ideal for implementation of LID BMP's. In addition, the section of Mississauga Road currently under construction is installing LID infrastructure along the east side of the roadway.
14. A number of locations for potential parking areas to service a potential canoe/kayak launching point were identified, as follows:
  - o South side of River Road, west of Mississauga Road
  - o Property owned by the Region on the west side of Mississauga Road, south of Embleton Road
  - o Southeast corner of Mississauga Road and Queen Street (former right turn speed change lane)
15. Permeable pavers was suggested for the multi-use trails, which would help achieve infiltration targets. The exact infiltration targets (2mm or 5mm) will be confirmed later in the study.

Meeting Minutes prepared by,

Amec Foster Wheeler Environment & Infrastructure  
A Division of Amec Foster Wheeler Americas Limited

Continued...  
Meeting Date: November 8, 2016

Per: Heather Dearlove, B.Sc.  
Environmental Planner

HD/kf

# Technical Agency Committee Meeting No. 1

Region of Peel

## Class Environmental Assessment

Mississauga Road From Financial Drive to Queen Street

## Class Environmental Assessment Addendum

Mississauga Road From Queen Street West to Bovaird Drive



# Agenda



Common to Location 1 and 2

Location 1 Only – Class EA

Location 2 Only – Addendum



1. Introductions and Status Update (5 minutes – Neal Smith, Region of Peel)
2. Presentation on Technical Investigations (45 min – Amec Foster Wheeler Project Team)
  - Transportation and Traffic Study
  - Natural Environment (Aquatic and Terrestrial)
  - Fluvial Geomorphology
  - Hydrology and Hydraulics / Stormwater Management
  - Archeology
  - Built Heritage and Cultural Landscape Assessment
3. Initial Assessment of Planning Alternatives (15 min – Amec Foster Wheeler Project Team)
4. Presentation of 30% Design for EA Addendum (15 min – Sargon Sifo, Region of Peel)

Break (10 min)

5. Group Discussion (15 min - All)
6. Next Steps (15 min – David Sinke, Amec Foster Wheeler)

# Meeting Objective



1. Review background investigations completed for Location 1 and Location 2
2. Review and provide comments on the preliminary assessment of planning alternatives for Location 1 (Class Environmental Assessment (EA))
3. Review and provide comments on preliminary design for Location 2 (Addendum)
4. Provide comments

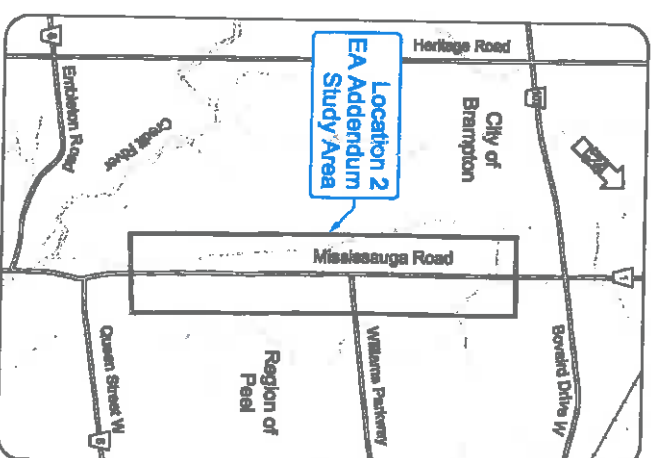
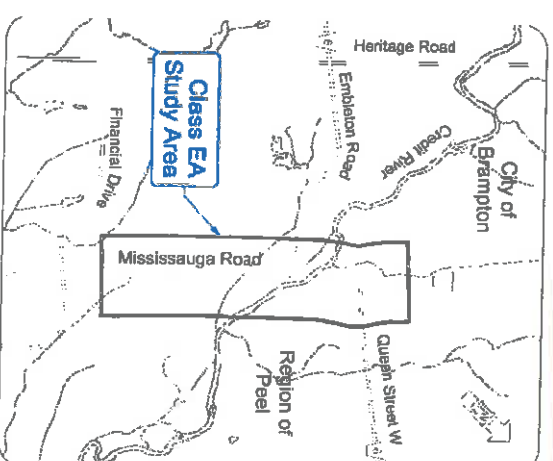


# Introduction

The Region of Peel has initiated two projects:

**Location 1:** Class Environmental Assessment Study Area - The study area is located within the City of Brampton and extends from just north of Financial Drive to just north of Queen Street West.

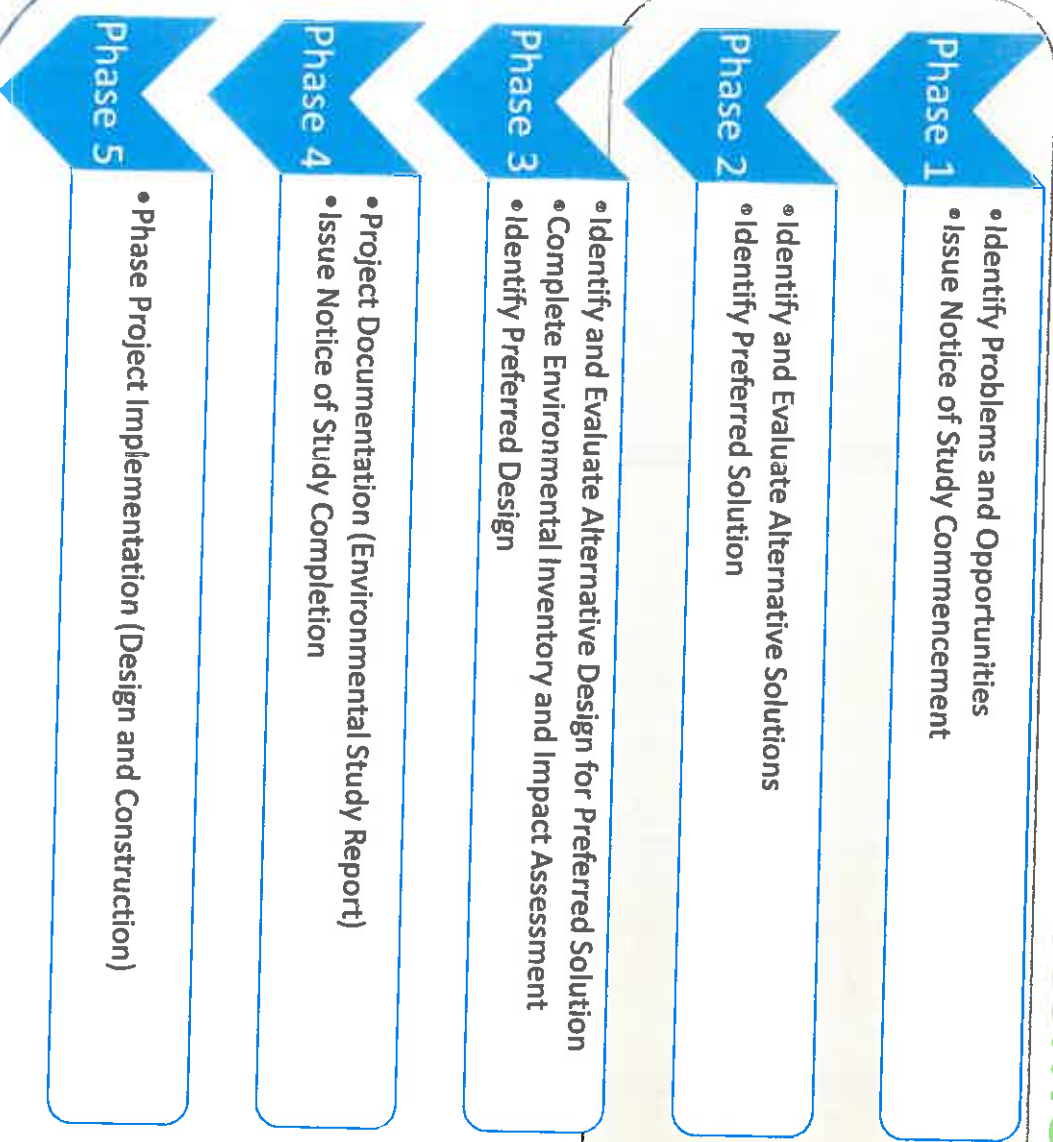
**Location 2:** Environmental Assessment Addendum Study Area - The study area is located within the City of Brampton and extends from Queen Street West to Bovaird Drive West.



# Class Environmental Assessment Process



Completed as part of  
Peel's Long Range  
Transportation Plan



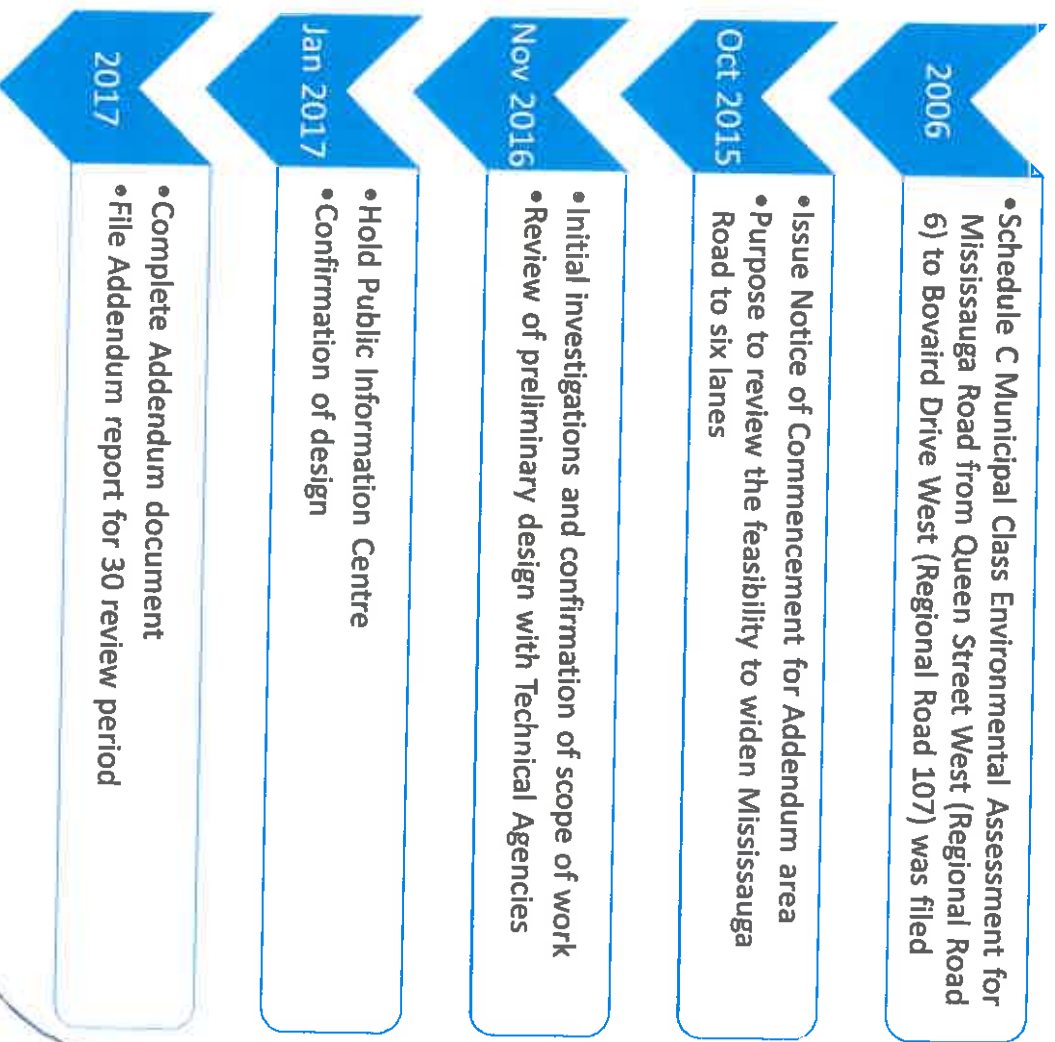
↑  
PIC No. 1  
January 2017

↑  
PIC No. 2  
Spring 2017

## Class EA Addendum Process



- + An addendum is completed by a Municipality if it is not feasible to implement the project in the manner outlined in the original ESR.
- + If there is any significant modification to the project or change in the environmental setting for the project which occurs after the filing of the ESR an Addendum will be issued.
- + The addendum shall describe the circumstances for the change, the environmental implications of the change, and any mitigation measures for potential negative environmental impacts.





## Technical Investigations Class EA and Addendum



As part of the Class EA and the EA Addendum study, the following investigations are being completed:

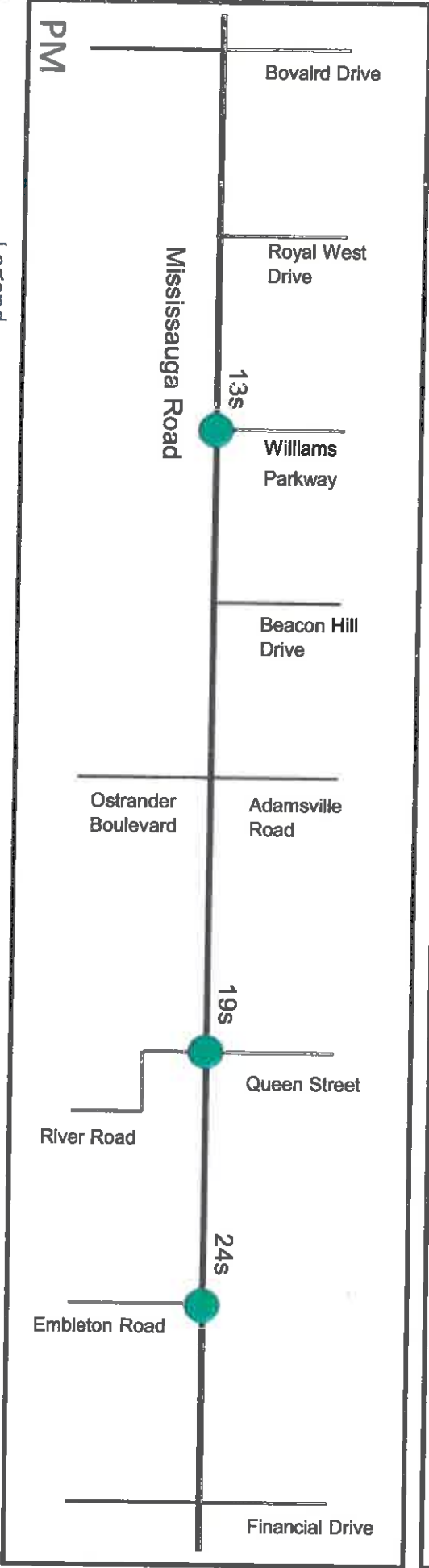
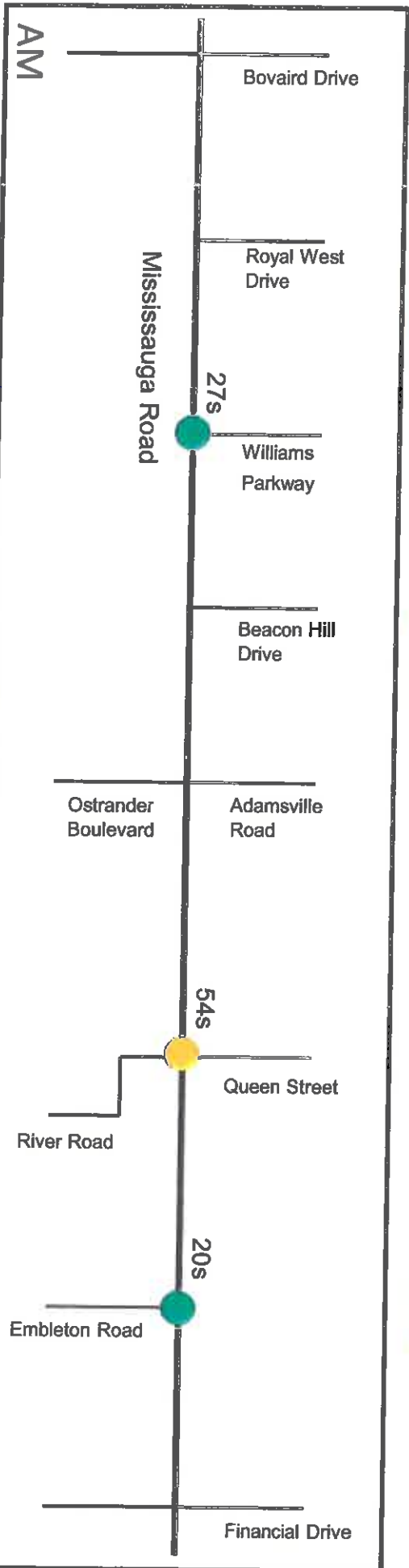
- + Transportation and Traffic Study (including Safety Performance Report)
- + Natural Environment Assessment (aquatic and terrestrial)
- + Drainage and Stormwater Management
- + Fluvial Geomorphology Analysis
- + Stage 1 Archaeological Assessment
- + Cultural and Built Heritage
- + Hydrogeological Investigation
- + Culvert and Structural Analysis and Inspection
- + Geotechnical Investigation, Pavement Design Report, and Contaminated Soil Assessment
- + Noise Impact Study
- + Air Quality Assessment
- + Landscaping/Streetscaping Assessment and Design

## Transportation and

### Traffic Study – Class EA and Addendum

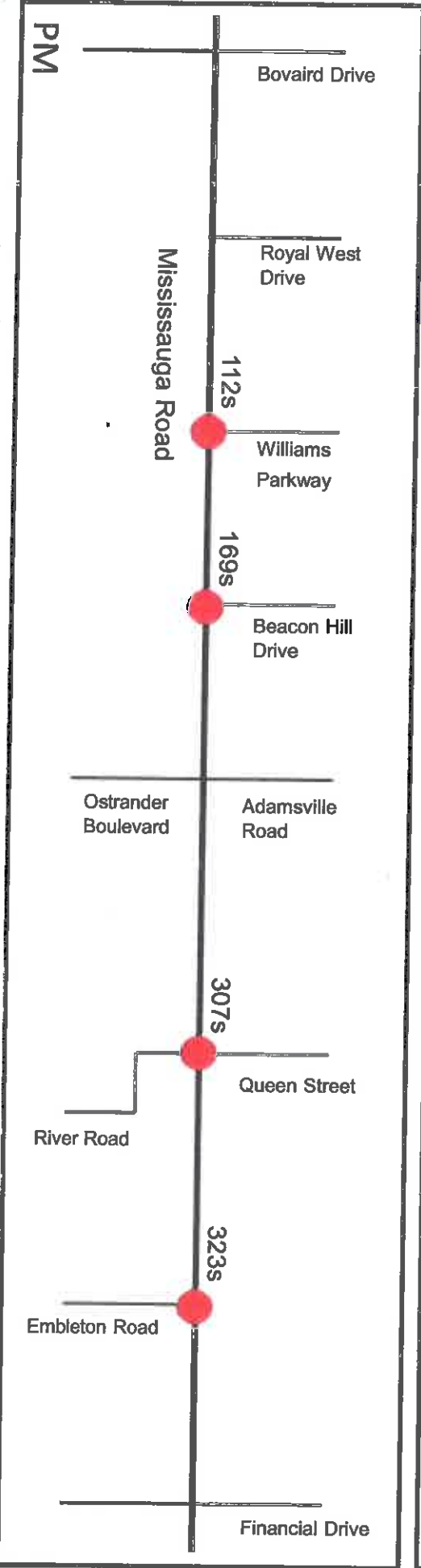
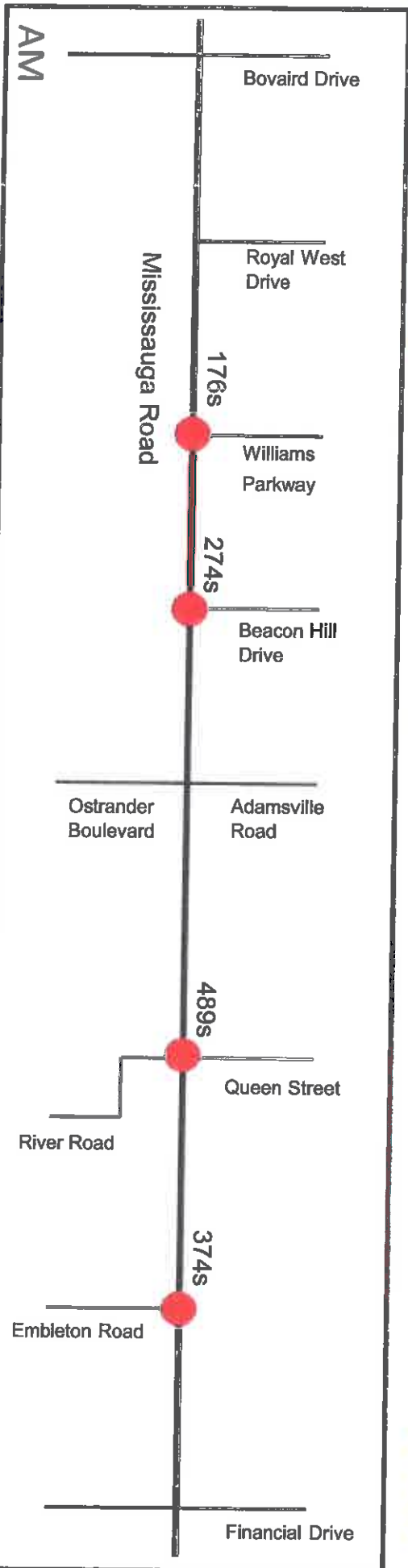
- Existing Conditions (2015)
  - + Midblock traffic volumes approaching or already exceed capacity at some locations
  - + Intersections operate acceptably during peak hours, with some problem movements. Optimizing signal timings would help.
  - + Potential safety concerns – discontinuities in active transportation facilities, some pavement markings not visible under dark and wet condition, small street name signs difficult to see, gaps for unsignalized intersections
- Future Conditions (2031)
  - + Findings consistent with 2012 LRTP
  - + Midblock traffic volumes forecast to exceed capacity, even with six (6) lanes
  - + Several intersections expected to operate poorly, with numerous overcapacity movements
  - + Retaining four (4) lane crossing over Credit River would significantly deteriorate operations, even with roundabouts
- Recommendations
  - + Widen to six (6) lanes between Financial Drive and south of Bovaird Drive, consistent with 2012 LRTP
  - + Second westbound left turn lane and signal timing changes at Williams Parkway and Queen Street West/River Road

# Existing (2015) Traffic Conditions



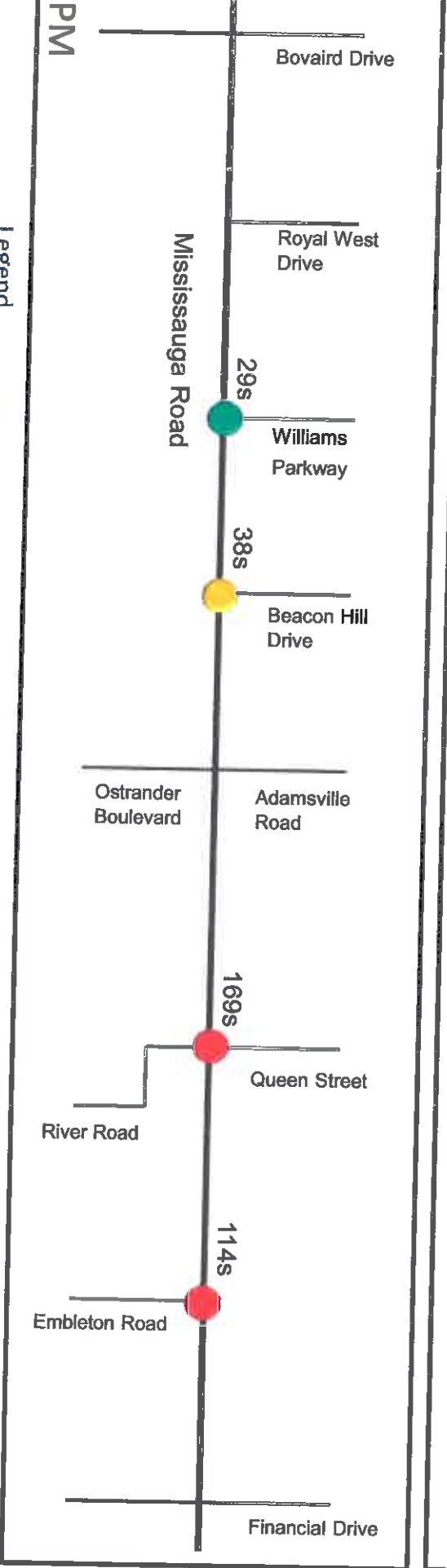
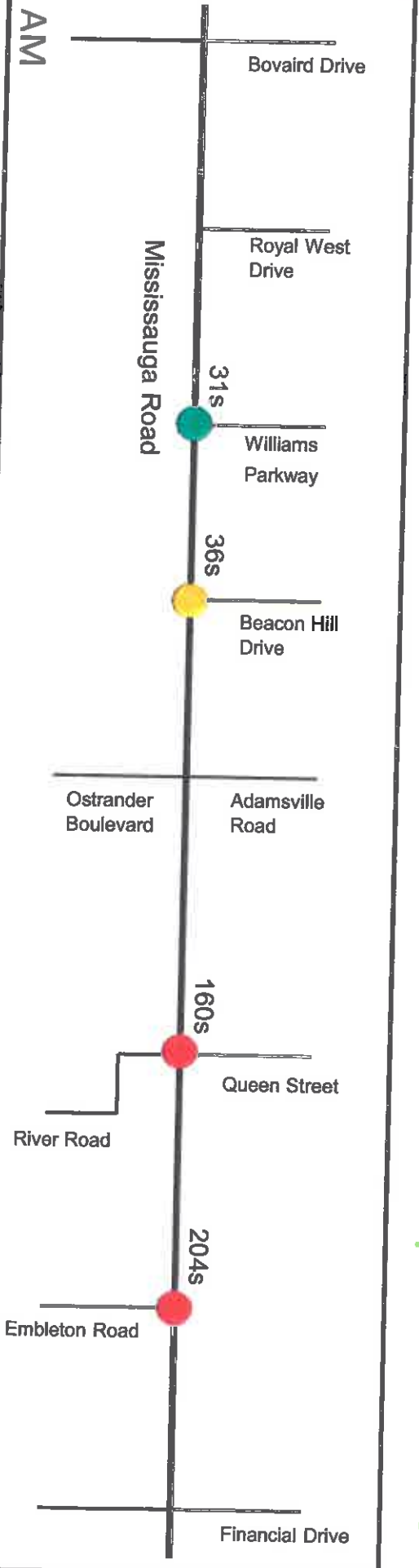
- Legend**
- 27s** Delay encountered by a driver at the signalized Intersection
  - Red Circle** Represents congested conditions with slow operating speeds, high delays, and extensive queues at Intersections
  - Yellow Circle** Represents moderate congestion where small increases in volume can reduce operating speeds and increase delays and queues at Intersections
  - Green Circle** Represents stable traffic flow conditions with modest reduction in operating speeds and minimal delays at Intersections

# Future (2031) Conditions – No Improvements



- Legend**
- 27s Delay encountered by a driver at the signalized intersection
  - Represents congested conditions with slow operating speeds, high delays, and extensive queues at intersections
  - Represents moderate congestion where small increases in volume can reduce operating speeds and increase delays and queues at intersections
  - Represents stable traffic flow conditions with modest reduction in operating speeds and minimal delays at intersections

# Future (2031) Conditions – With Improvements



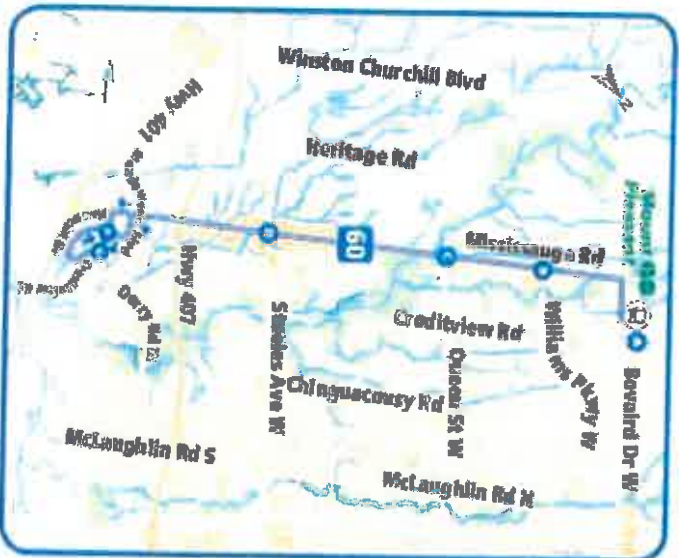
- Legend**
- Delay encountered by a driver at the signalized intersection
  - Represents congested conditions with slow operating speeds, high delays, and extensive queues at intersections
  - Represents moderate congestion where small increases in volume can reduce operating speeds and increase delays and queues at intersections
  - Represents stable traffic flow conditions with modest reduction in operating speeds and minimal delays at intersections

27s

# Existing and Future Transit Initiatives

- Brampton Transit currently operates one bus route that extends through the study area - Route 60 Mississauga Road

- Planned expansion of Brampton Transit's Züm Bus Rapid Transit along corridor



# Active Transportation Facilities

- Active transportation infrastructure varies depending on the road cross-section

- Pedestrian infrastructure is in the form of either a sidewalk or multi-use trail on at least one side of the road



# Natural Environment – Class EA



## Aquatic Environment

- Two Watercourses in the study area:
  - + Credit River main branch –  
Cool/warmwater watercourse
  - + Unnamed Intermittent Tributary –  
Does not provide fish habitat
- Fish Species: 62 species are reported in the Credit River watershed including:
  - + American Brook Lamprey
  - + American Eel
  - + Atlantic Salmon
  - + Salmonidae family including Rainbow Trout, Brown Trout, and Coho Salmon



# Natural Environment – Class EA



## Natural Sciences

- Breeding Bird Study was completed:
  - + 33 species were identified
  - + Barn Swallow and Chimney Swift were reported
  - + Nests reported under the Credit River Bridge
    - 11 Cliff Swallow and 1 Barn Swallow
- An Ecological Land Classification (ELC) analysis was completed:
  - + No Species At Risk plants were identified
- A Species At Risk (SAR) habitat suitability study was completed for the study area
- Significant Natural Areas
  - + Provincially Significant Wetland (PSW) identified within study area



Barn Swallow



Cliff Swallow



Chimney Swift



## Natural Environment – Class EA



### Natural Sciences

- Ministry of Natural Resources and Forestry (MNRF) reported the following confirmed SAR in the study area: 2 plant species, and 4 birds species:
  - + Butternut – endangered
  - + American chestnut – endangered
  - + Eastern Meadowlark – threatened
  - + Bobolink – threatened
  - + Chimney Swift – threatened
  - + Barn Swallow – threatened
- MNRF also lists an additional three mammal species, two bird species and one invertebrate could potentially occur in the study area:
  - + Eastern Small-footed Myotis – threatened
  - + Little Brown Myotis – endangered
  - + Northern Myotis – endangered

# Natural Environment Addendum



## Aquatic Environment

- Two adjacent watercourses and one watercourse crossing are within the addendum area:
  - + Huttonville Creek – warmwater watercourse (flows adjacent to the study area)
  - + Unnamed Tributary of Huttonville Creek – not fish habitat (crosses under Mississauga Road)
  - + Unnamed Tributary of the Credit River – warmwater watercourse (flows adjacent to the study area)
- Huttonville Creek:
  - + Redside Dace – endangered
  - + Creek Chub
  - + Blacknose Dace
  - + Brook Stickleback
- Unnamed Tributary of Credit River (no fish community available – fish barrier at the mouth of the tributary)



Redside Dace

# Fluvial Geomorphology

## Class EA



- The Credit River crossings was evaluated following the standard methods for Meander Belt Assessment and Crossing Assessment, taking into consideration the CVC regulatory guidelines.

The results of the evaluation for this crossing are:

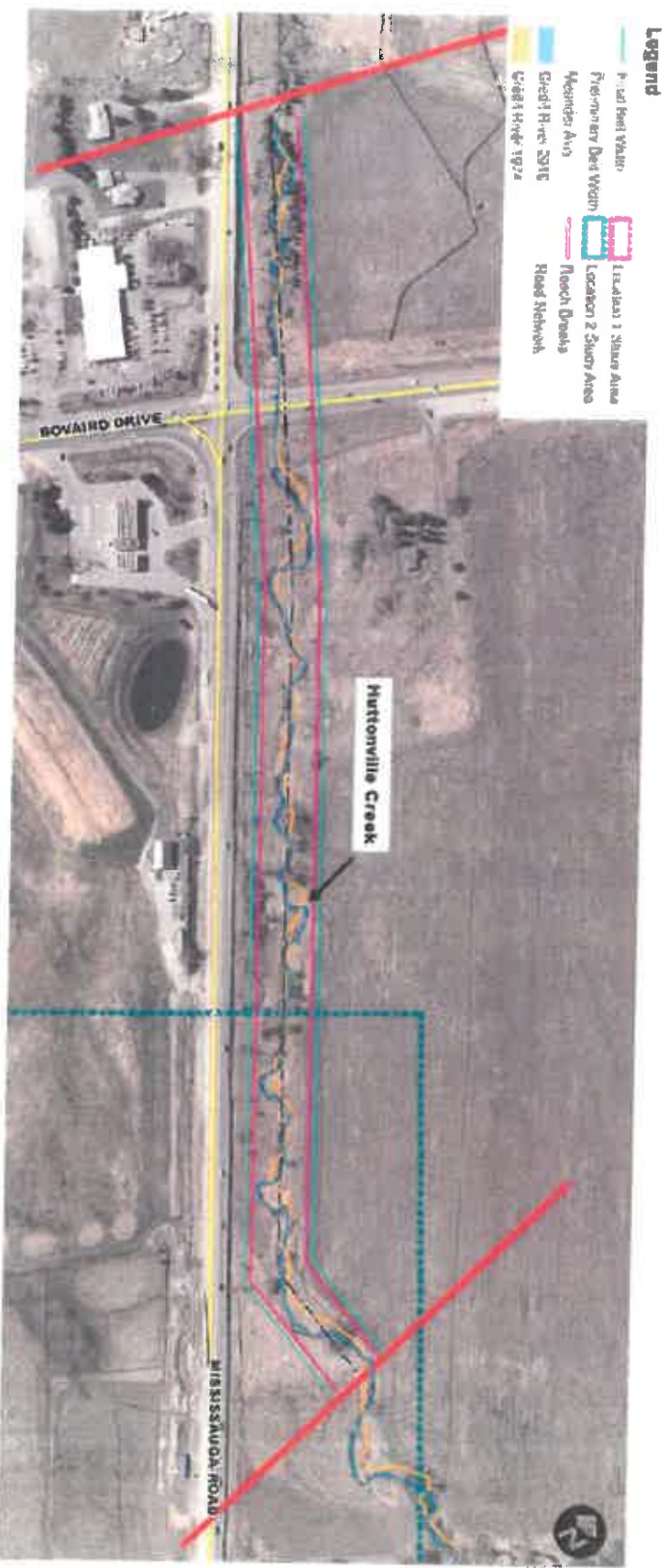
Preliminary Meander Belt Width (m)	100-year Migration Rates (bits)	Meander Amplitude (m)	Bankfull Width (m)	Valley Setting	RGA Score (Risk)	Recommended Structure Size (m)
140	12 (Moderate)	70	23-27 Average (25 m)	Semi-Confined	0.16 (Stable-low)	75



# Fluvial Geomorphology Addendum



- Two additional watercourses which parallel Mississauga Road and one crossing are contained within the addendum area, as follows:
  - + Huttonville Creek – The meander belt width is estimated at 36.6m (larger than the 32.8m originally identified by Trow (2006b))
  - + The new belt width does not cross or contact existing Mississauga Road



# Fluvial Geomorphology Addendum



– Unnamed Credit River Tributary – The meander belt width is estimated at 43.2m, and contacts existing Mississauga Road.

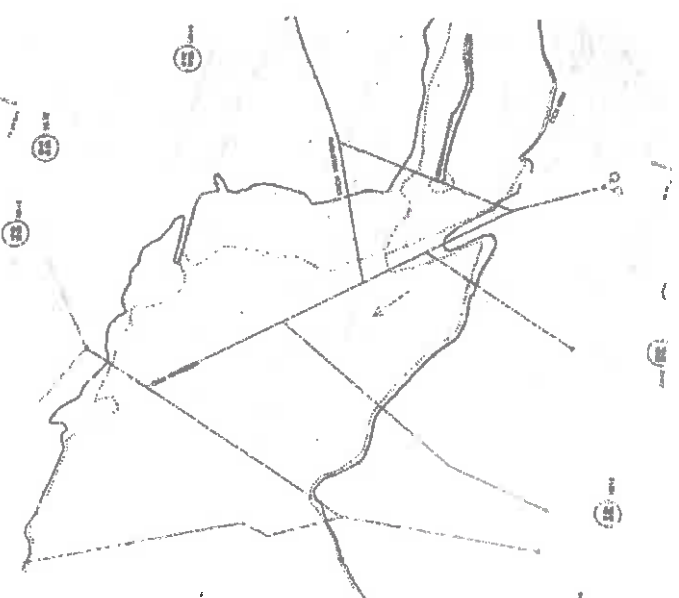


– Unnamed Tributary to Huttonville Creek – The original CSP crossing has recently been reconstructed to a box culvert. The culvert at this location is for an ephemeral tributary. Any improvements to this crossing will be deferred to hydraulic flow requirements only.

# Hydrology and Hydraulics / Stormwater Management – Class EA



- + Mississauga Road drains to both the Credit River and Levi Creek
- + Road storm sewer system will be utilized to the extent possible, although upgrades may be required
- + Credit River bridge floods during large storm events (e.g. Regulatory Storm - Hurricane Hazel)
- + The Credit Valley Conservation Authority requires the following stormwater management design criteria to be achieved:
  - + Water quality treatment of road runoff; and
  - + Infiltration of some road runoff to contribute to groundwater recharge



Credit River  
Flood Limits

# Hydrology and Hydraulics / Stormwater Management – Class EA



## Hydrology and Hydraulics / Stormwater Management – Addendum

- + Mississauga Road drains to Huttonville Creek and a tributary to the Credit River
- + Existing stormwater management infrastructure, including storm sewers and adjacent stormwater management ponds, will be utilized to the extent possible, although upgrades may be required.
- + The Credit Valley Conservation Authority requires the following stormwater management design criteria to be achieved:
  - + Water quality treatment of road runoff;
  - + Infiltration of some stormwater runoff to contribute to groundwater recharging; and
  - + Maintain peak flows for all storm events including Regulatory Storm - Hurricane Hazel





# Hydrology and Hydraulics / Stormwater Management – Addendum



## Stage 1 Archaeological Assessment (AA) Class EA and Addendum

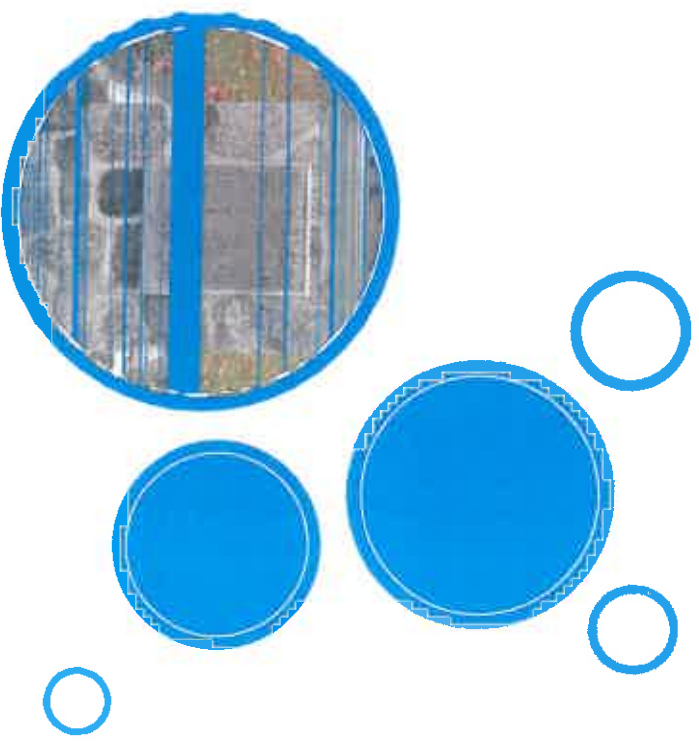
A Stage 1 AA was completed for both study corridors and recommended a Stage 2 AA be completed prior to any construction activities.



## Built Heritage and Cultural Landscape Assessment - Class EA and EA Addendum

The Built Heritage and Cultural Landscape Assessment was completed along both corridors and the following was determined:

- + 10 Built Heritage properties and 1 Cultural Landscape within the Class EA corridor and
- + 2 Built Heritage properties and 2 Cultural Landscapes within the EA Addendum corridor, including the Huttonville Cemetery.
- + The reports recommend to avoid encroachment onto Built Heritage properties and Cultural Heritage Landscapes if at all possible and if it cannot be avoided and protected, a Heritage Impact Assessment should be completed



## Additional Technical Investigations

The following investigations will be completed for the Mississauga Road Corridor:



## Problem and Opportunity

### Statement – Refinement Class EA



Based on a review of existing and future conditions, as well as preliminary consultation with stakeholders, it has been determined that improvements are needed along the Mississauga Road corridor. The specific problems and opportunities to be addressed are as follows:

- + existing and future traffic congestion;
- + accommodation of transit;
- + roadway geometrics;
- + pedestrian and cyclists facilities;
- + intersection operations;
- + traffic, pedestrian and cyclist safety;
- + drainage deficiencies and opportunities for stormwater management;
- + pavement condition, and
- + accommodation of future municipal services and utilities within the ultimate right-of-way.



# Alternative Solutions – Class EA

Six alternative solutions were developed to address the problem statement

## 1. DO NOTHING

- No improvements
- Continue regular maintenance

## 2. IMPROVE OTHER ROADS

- Add capacity to adjacent parallel roads to accommodate

## 3. TRANSIT INFRASTRUCTURE IMPROVEMENTS

- Improve transit infrastructure to support Brampton Zum Rapid Transit Services and address capacity requirements

## 4. TRAVEL DEMAND MANAGEMENT

- Encourage and support change in travel behaviour to reduce peak demand by:
- Promoting car-pooling and possible HOV
  - Promoting flexible work hours.
  - Increasing active transportation trips (biking/ walking)

## 5. WIDEN MISSISSAUGA ROAD

- Addition of through traffic lanes including intersection improvements, to increase traffic capacity of the corridor

## 6. COMBINATION

- Combination of:
- Improve transit services
  - Travel Demand Management
  - Widen Mississauga Road

**Note: Alternative 2 was eliminated as part of Peel's Long Range Transportation Plan process and was subsequently not assessed.**

# Evaluation Criteria – Class EA

## Natural Environment

- Wetlands and Vegetation
- Wildlife Habitat
- Species at Risk
- Groundwater
- Fisheries and Water Quality
- Flooding, Erosion and Water Quality

## Social Environment

- Land Use
- Noise
- Archaeology and Cultural Heritage Resources
- Agricultural Access
- Considerations
- Utilities
- Construction Disruptions

## Health

- Active Modes of Transportation
- Accessibility (AODA)
- Air Quality

## Transportation

- Safety
- Travel Delay/ Traffic Capacity
- Transit

## Cost

- Capital Cost

## Technical

- Constructability
- Adherence to Applicable Design Standards

## Transportation Plans and Policies

- Compatibility with Regional and City Transportation Plans and Policies

# Alternative Solutions Assessment

## Class EA

	DO NOTHING	TRANSIT INFRASTRUCTURE IMPROVEMENTS	TRAVEL DEMAND MANAGEMENT	WIDEN MISSISSAUGA ROAD	COMBINATION
Natural Environment	1	3	1	4	4
Social Environment	4	2	2	3	3
Health	5	3	4	2	1
Transportation	5	4	5	2	1
Cost	1	2	1	5	5
Technical	3	4	3	3	3
Transportation Plans and Policies	5	4	4	1	1

- 1 – Most Preferred**
- 2 – Preferred**
- 3 – Neutral**
- 4 – Not Preferred**
- 5 – Least Preferred**



## Preliminary Recommended Alternative Solution – Class EA



The preliminary recommended alternative solution is Alternative 6: A combination of Alternatives 3-5, as follows:

3. **Transit Infrastructure Improvements**
4. **Travel Demand Management**
5. **Widen Mississauga Road including additional through lanes and intersection improvements**

A combination of Alternative 3 - 5 will address the problem statement developed for the Mississauga Road corridor, while minimizing environmental impacts.

## Presentation of 30% Design Location 2 (Addendum)

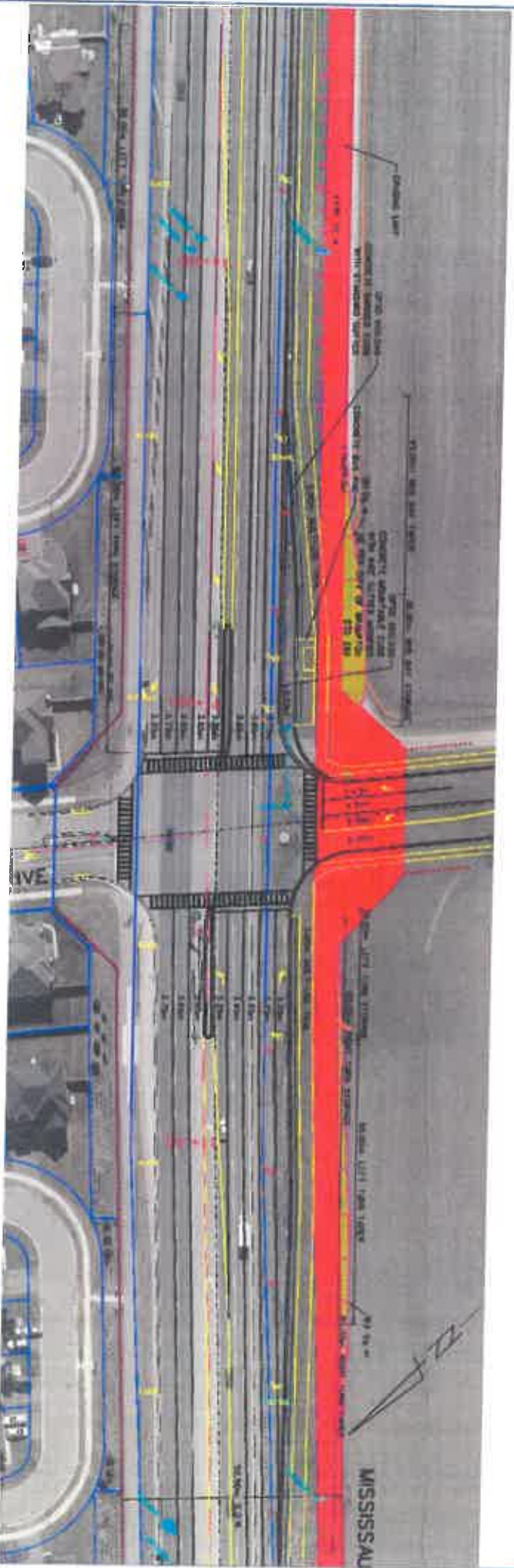
- The Region of Peel is completing an EA Addendum to the Schedule C Municipal Class Environmental Assessment for Mississauga Road from Queen Street West (Regional Road 6) to Bovaird Drive West (Regional Road 107).
- The purpose of the addendum is to review the feasibility to widen Mississauga Road to six lanes.
- The Addendum area was included in the Transportation and Traffic Study (including Safety Performance Report) investigation.
- The Transportation and Traffic Study recommends widening of Mississauga Road to six lanes to accommodate future traffic volumes.
- Based on the technical studies completed to date, there are no major environmental constraints within the addendum area.

# Presentation of 30% Design Location 2 (Addendum)



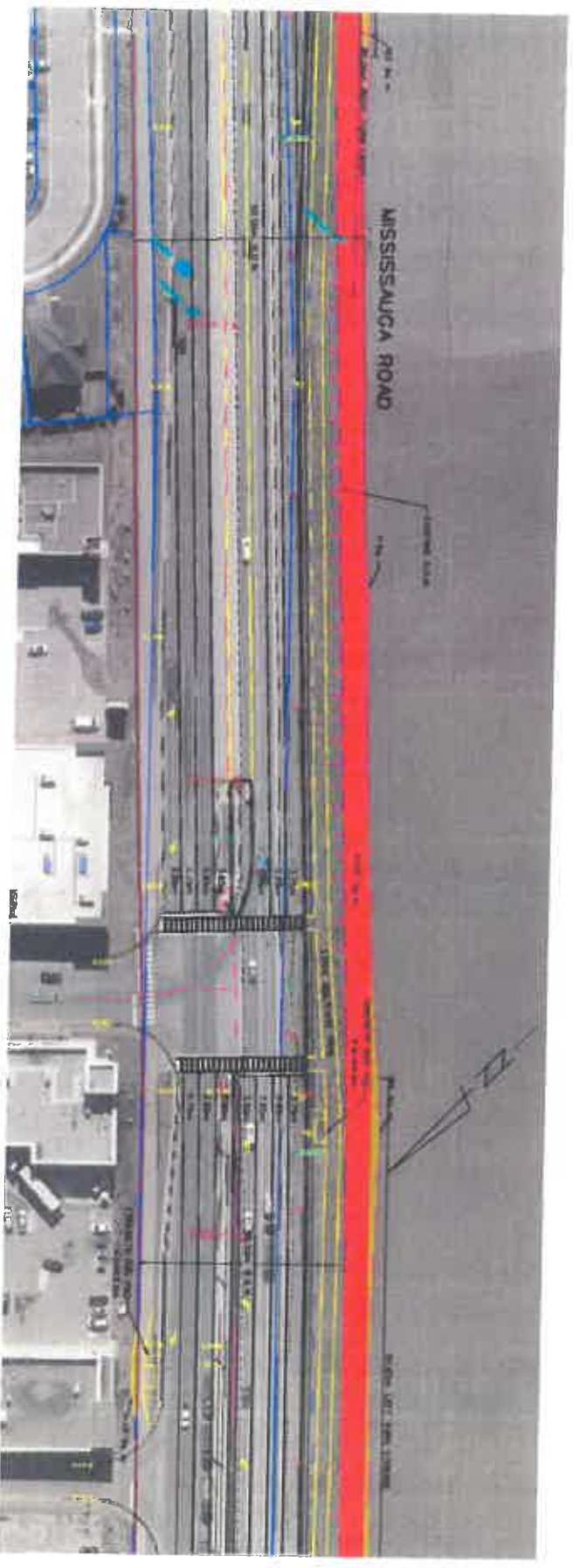
Mississauga Road from Ostrander Boulevard to 300m north of Ostrander Boulevard

# Presentation of 30% Design Location 2 (Addendum)



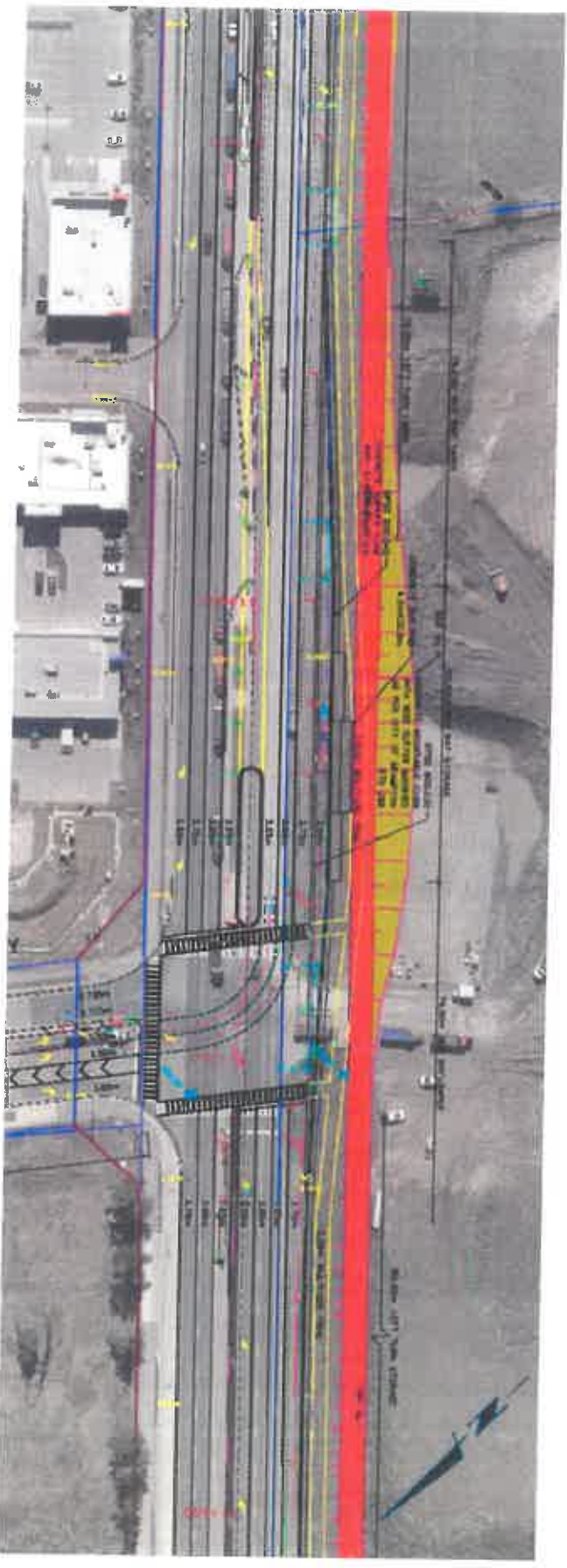
Mississauga Road from 300m north of Ostrander Boulevard to 200m north of Beacon Hill Drive

# Presentation of 30% Design Location 2 (Addendum)



Mississauga Road from 200m north of Beacon Hill Drive to intersection with commercial development (Wal-Mart, etc.)

# Presentation of 30% Design Location 2 (Addendum)



Mississauga Road from intersection with commercial development (Wal-Mart, etc.) to Williams Parkway

# Presentation of 30% Design Location 2 (Addendum)



Mississauga Road from Williams Parkway to 500m north of Williams Parkway

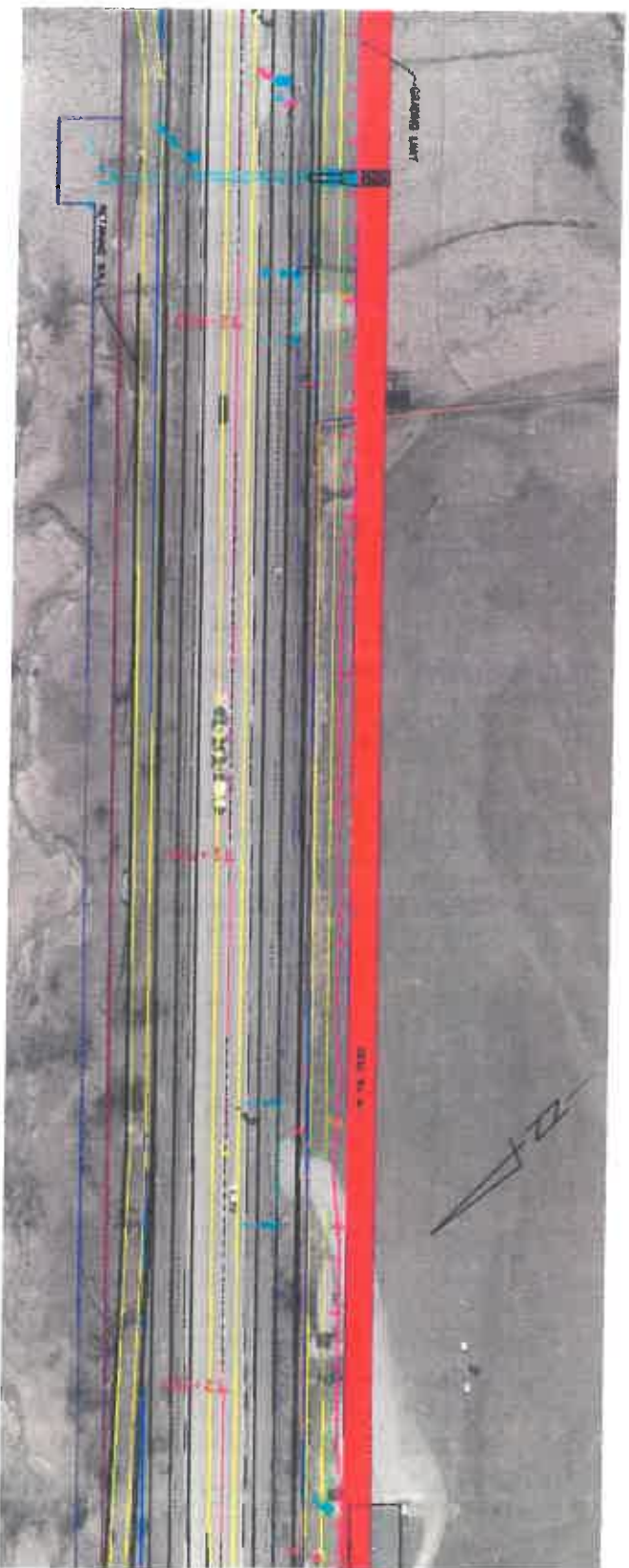
# Presentation of 30% Design Location 2 (Addendum)



Mississauga Road from 500m north of Williams Parkway to 300m north of Royal West Drive

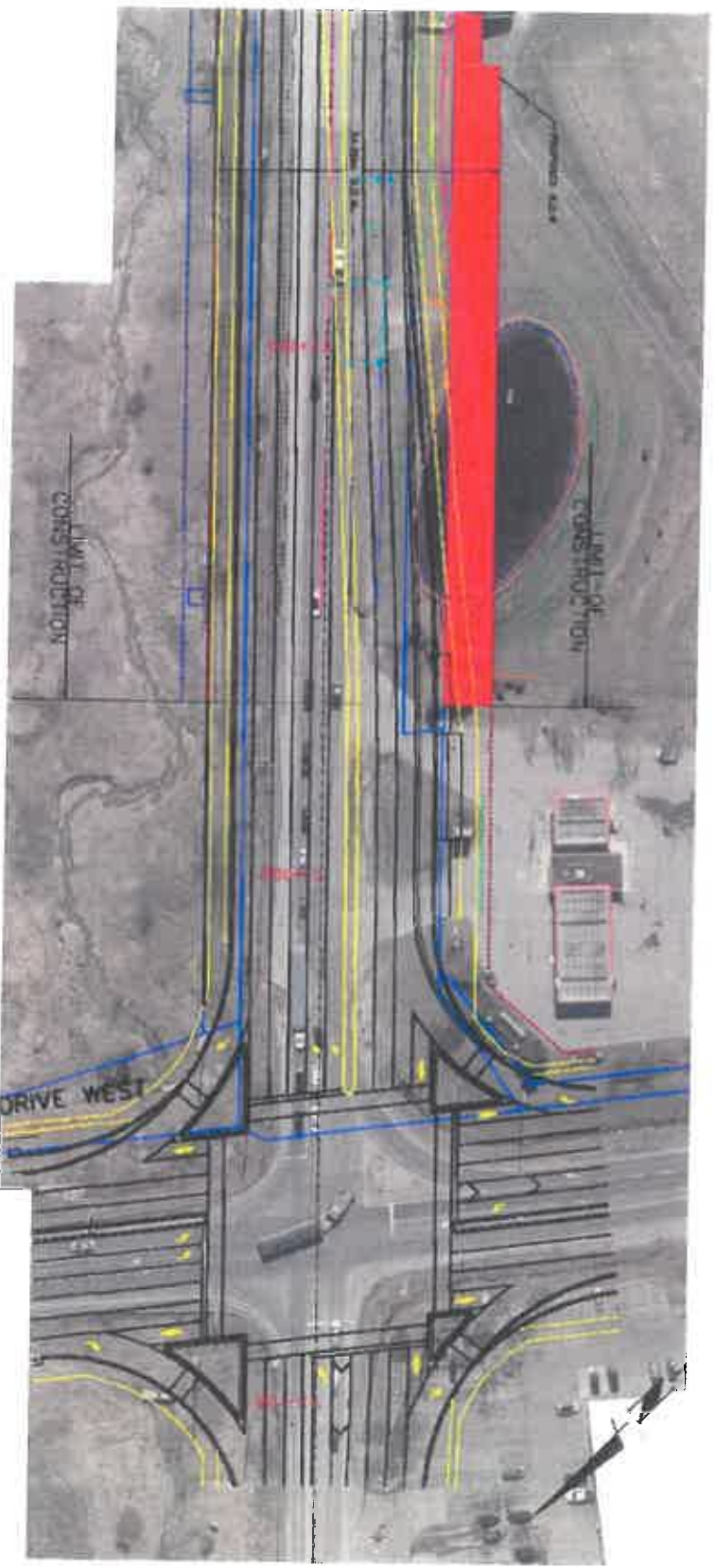


# Presentation of 30% Design Location 2 (Addendum)



Mississauga Road from 300m north of Royal West Drive to 300m south of Bovaird Drive

# Presentation of 30% Design Location 2 (Addendum)



Mississauga Road from 300m south of Bovaird Drive to Bovaird Drive

**BREAK (15 min)**

**Group Discussion (15 min)**

## Group Discussion

### Remember the Meetings Objectives:

1. Review background investigations completed for Location 1 and Location 2
2. Review and provide comments on the preliminary assessment of planning alternatives for Location 1 (Class Environmental Assessment (EA))
3. Review and provide comments on preliminary design for Location 2 (Addendum)
4. Provide comment on next steps

## Next Steps

### Class EA

1. Review and confirm preferred planning alternatives and assessment in light of comments received from the agency representatives
2. Hold Public Information Center No.1 in January 2017
3. Complete environmental inventory
4. Develop alternative design concepts
5. Complete detailed impact analysis
6. Public Information Center No. 2 - to be held in Spring 2017
7. Prepare and File Environmental Study Report

### EA Addendum

1. Hold Public Information Center in January 2017
2. Complete environmental inventory
3. Confirm design in light of comments received from the public and agencies
4. Prepare Environmental Assessment Addendum Report

# Thank You

# Minutes

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**Date:** January 17, 2017  
**File #:** TP115085  
**Meeting Date & Time:** January 10, 2017 @ 3:00 p.m.  
**Meeting at:** Region of Peel Headquarters  
**Subject:** Mississauga Road Class EA  
Background Drainage and Stormwater Management Information Discussion

**Attendees:**

Gino Dela Cruz, Region of Peel

Mark Heaton, MNRF

John Nemeth, Region of Peel

Neal Smith, Amec Foster Wheeler

Jibril Farah, Region of Peel

Steve Chipps, Amec Foster Wheeler

Jakub Kilis, CVC

Matt Britton, Amec Foster Wheeler

Rebecca Stewart, CVC

**Regrets:**

David Sinke, Amec Foster Wheeler

Jason Stahl, Amec Foster Wheeler

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## MATTERS DISCUSSED

## ACTION BY:

### 1. Introductions

Neal Smith and Steve Chipps introduced the meeting indicating its purpose to discuss the background information relevant to stormwater management (SWM), including design reports and drawings completed by various consultants, as well as existing and proposed infrastructure within the Mississauga Road right-of-way (R.O.W.).

The Memo prepared by Amec Foster Wheeler titled "Summary of Mississauga Road Background Drainage and Stormwater Management Information for Discussion Memo" dated January 6, 2017, was forwarded to attendees by the Region on January 9, 2017.

### 2. Design Criteria

The Credit Valley Conservation Authority, Region of Peel, and Ministry of Natural Resources and Forestry staff were requested to provide input on the design criteria relevant to SWM for the Class EA and Class EA

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**PLEASE NOTE:** If there is any comment or amendment to be made to these meeting notes, they should be brought to the notice of Amec Foster Wheeler within five (5) business days of issue and confirmed in writing.

## **MATTERS DISCUSSED**

## **ACTION BY:**

Addendum sections of Mississauga Road. The following arose in discussion:

### **Credit Valley Conservation Authority (CVC)**

- i. Quantity Control: Rebecca Stewart advised that post-to-pre-development control for the 2-100 year design storm events is required for lands draining to the Huttonville Creek and Unnamed Tributary, as per the Class Environmental Assessment Study completed by Trow Associates Inc. (November 2006).
- ii. Rebecca Stewart advised that all other CVC design criteria for the Huttonville Creek and Unnamed Tributary, the Credit River and Levi Creek, as listed in the Memo is acceptable.

### **The Region of Peel (Region)**

- i. John Nemeth advised that directing runoff from external lands to the Region storm sewer system is not permitted.
- ii. John Nemeth advised that the Region engineering design criteria does not contain quantity and quality control criteria. The quantity and quality control criteria listed under "The Region of Peel" in the Memo is not to be carried forward.
- iii. John Nemeth advised that the remaining Region design criteria listed in the Memo is acceptable.
- iv. John Nemeth advised that the SWM reports to be prepared for the Class EA and Class EA Addendum must follow the Region of Peel's Guidelines for the Preparation of Stormwater Management Reports in Support of Municipal Class Environmental Assessments (June 2014).
- v. In the context of SWM design criteria, John Nemeth advised of a forthcoming Ministry of Environment and Climate Change (MOECC) document which will incorporate new requirements for stormwater management. John Nemeth to provide Amec Foster Wheeler with Draft MOECC criteria pertaining to road improvements and widening for use in preparing the Class EA and Class EA Addendum.

**Amec Foster  
Wheeler**

**Region**

### **The Ministry of Transportation (MTO)**

- i. Steve Chipps stated that the MTO criteria listed in the Memo is as per the MTO Highway Drainage Design Standards (2008).



**MATTERS DISCUSSED**

**ACTION BY:**

**The Ministry of Natural Resources and Forestry (MNR)**

- i. Mark Heaton advised that thermal mitigation reducing stormwater runoff temperatures to below 24°C is required for all stormwater draining to Redside Dace habitat.
- ii. Mark Heaton advised that the post-development water balance solution must infiltrate the first 5-15 mm of rainfall.
- iii. Mark Heaton advised that a sand plain was discovered within the R.O.W. during the watermain construction works. A Hydrogeological Report was completed by AES International for the watermain construction project and provides information relevant to the sand plain. Region to provide the AES International Hydrogeological Report to Amec Foster Wheeler for use in completing the Class EA Addendum.
- iv. Mark Heaton advised that a Hydrogeological Report completed by R.J. Burnside/Schaeffers Consulting for the Bluegrass subdivision outlines infiltration targets established for the sand plain area. Mark Heaton also recommended the sand plain be utilized for infiltration practices within the R.O.W. Amec Foster Wheeler to contact Joanne Thompson at R.J. Burnside to obtain the Hydrogeological Report.

**Region**

**Amec Foster  
Wheeler**

**3. Background Review Comments**

The Credit Valley Conservation Authority, Region of Peel, and Ministry of Natural Resources and Forestry staff were requested to provide input on the following background reports reviewed by Amec Foster Wheeler for the Class EA and Class EA Addendum sections of Mississauga Road. The following arose in discussion:

**SWM Report for Mississauga Road Improvement Project from Williams Parkway to Bovaird Drive & Bovaird Drive at Mississauga Road Intersection – TMIG (November 2015)**

- i. Steve Chipps indicated that the quantity control design proposed within The Municipal Infrastructure Group report appears to provide post-to-pre-development control for the 10 year storm only. CVC reiterated that the Class EA Addendum must incorporate SWM controls as discussed.
- ii. John Nemeth advised that questions pertaining to the design elements outlined in the TMIG report should be directed to TMIG. John Nemeth advised that Amec Foster Wheeler may contact TMIG as necessary. Amec Foster Wheeler to contact TMIG to confirm if the proposed design addresses the ultimate six (6) lane R.O.W.

**Amec Foster  
Wheeler**

Continued...

Meeting Date: January 10, 2017

**MATTERS DISCUSSED**

**ACTION BY:**

- iii. Jibril Farah advised that the storm sewers designed by MMM Group Ltd. were designed for the ultimate R.O.W., which was confirmed by MMM Group Ltd. Jibril Farah to provide the MMM Group Ltd. storm drainage area plans and storm sewer design sheets to Amec Foster Wheeler for use in completing the Class EA Addendum.
- iv. CVC staff advised that Culvert C4 does not convey drainage from a regulated tributary and that their only concern pertaining to the proposed upgrade was the resulting increase in flood elevations impacting the lands on the upstream side of the culvert. Further, CVC staff advised that they have no concern with the proposed upgrade.
- v. Region staff advised that the only anticipated changes to the Culvert C4 are the lengthening on the west side to facilitate the ultimate R.O.W. construction.

**Region**

**Design Brief for LIDs within Mississauga Road between Williams Parkway and Bovaird Drive – Aquafor Beech (August 2015)**

- i. John Nemeth advised that questions pertaining to the design elements outlined in the Aquafor Beech report should be directed to Aquafor Beech. John Nemeth advised that Amec Foster Wheeler may contact Aquafor Beech as necessary. Amec Foster Wheeler to contact Aquafor Beech to confirm if the proposed design addresses the ultimate R.O.W.
- ii. The Region, CVC, and MNR indicated that they do not anticipate updates will be required to the Aquafor Beech LID design for the east portion of the R.O.W., between Bovaird Drive and Culvert C4.
- iii. Steve Chipps indicated that the report did not cover the east half of the R.O.W., south of Culvert C4, and that the only quality control provided for this drainage area is an OGS unit located at the storm sewer system outlet. Jakub Kilis indicated that quality controls in addition to the OGS unit will be required as an OGS is not sufficient to provide the required level of quality and a treatment train approach (additional controls) should be investigated.

**Amec Foster  
Wheeler**

Further, John Nemeth advised that the east side of the R.O.W. is not to be disturbed for the ultimate six (6) lane widening, therefore requiring that all proposed quality and quantity control solutions be implemented on the west half of the R.O.W.

**MATTERS DISCUSSED**

**ACTION BY:**

**Stormwater Management Report – Bluegrass South – Schaeffers Consulting (September 2013)**

- i. Matt Britton indicated that SWM Facility H3 discussed in this report provides SWM controls for a portion of the Mississauga Road R.O.W., however it is unknown if the drainage area accounted for covers the ultimate R.O.W.
- ii. John Nemeth advised that questions pertaining to the design elements outlined in the Schaeffers Consulting report should be directed to Schaeffers Consulting. John Nemeth advised that Amec Foster Wheeler may contact Schaeffers Consulting as necessary. Amec Foster Wheeler to contact Schaeffers Consulting to confirm SWM Facility H3 design details pertaining to the Mississauga Road R.O.W.
- iii. John Nemeth advised that the Region's preference is to direct minimal amounts of stormwater to SWM Facility H3. John Nemeth recommended infiltration practices be implemented to reduce runoff to SWM Facility H3.

**Amec Foster  
Wheeler**

**Stormwater Management Implementation Report – Four X Development – RAND Engineering (April 2015)**

- i. Region staff confirmed that the SWM Facilities within the Four X development do not provided SWM controls for any portion of the Mississauga Road R.O.W.

**Stormwater Management Report – Chariot Subdivision – Valdor Engineering (March 2007)**

- i. Matt Britton outlined that a significant section of the Mississauga Road R.O.W. drains to SWM Facility W1.
- ii. Based on a review of this report, it appears that SWM Facility W1 was sized for a drainage area with an overall imperviousness of 36%.
- iii. Matt Britton advised that that this impervious value is considered very low and there is concern that the SWM Facility may be undersized. The concern was endorsed by Jakub Kilis. Furthermore, Steve Chipps advised that an analysis will be completed to assess impacts to the SWM Facility resulting from the ultimate R.O.W. The analysis will incorporate an appropriate impervious value for the drainage areas to the facility.

The City of Brampton maybe able to provide more information regarding the original design of the pond to better understand the discrepancy between the calculations. If pond was built pre 2008, there may be historical data that would show how the pond

## MATTERS DISCUSSED

**ACTION BY:**

functioned during the July 8, 2013 storm. If the pond has been assumed by the City of Brampton, a clean out report and monitoring reports may be available.

- iv. John Nemeth advised that the Region's preference is to direct minimal amounts of stormwater to SWM Facility W1.
- v. John Nemeth recommended infiltration practices be implemented to reduce runoff to SWM Facility W1.

### **Contract 2 SWM Report – TMIG (July 2010)**

- i. Matt Britton outlined that this report proposes 10 year post-to-pre-development quantity controls for the Mississauga Road/Queen Street West drainage area that discharges directly to the Credit River.
- ii. CVC staff confirmed that no quantity controls are required for areas draining directly to the Credit River.
- iii. Region staff advised Amec Foster Wheeler that although the 10 year post-to-pre-development quantity controls are not required, they should not be removed.

## **4. Additional Items**

The following items were discussed throughout the meeting, which are not relevant to any particular background report. The items are listed in order of discussion:

- i. John Nemeth indicated that an LID retrofit system is currently being implemented within the center median planting beds at the Mississauga Road/Queen Street West intersection. The LID retrofit system was designed by Aquafor Beech. Amec Foster Wheeler to contact Aquafor Beech to obtain the LID retrofit design report.
- ii. John Nemeth and Mark Heaton advised that if the SWM infrastructure design for the ultimate R.O.W. is found to insufficiently service the R.O.W. then these items must be addressed in the report. Conversely, if the infrastructure is found to service the ultimate R.O.W., no analysis is required.
- iii. Jakub Kilis indicated that CSP Arch Culvert C9 is located within a regulated watercourse, and any works associated with the culvert will require a permit from CVC. Furthermore, Jakub Kilis indicated that the culvert may be undersized.

**Amec Foster  
Wheeler**

**MATTERS DISCUSSED**

**ACTION BY:**

- iv. Jakub Kilis indicated that Culvert C8 is not within a regulated watercourse and that it is believed to function as an equalization culvert for the adjacent wetland.
- v. Mark Heaton advised that a Fish Compensation Plan was prepared for the wetland by SLR Consulting/R.J. Burnside and is provided within the Block 40-3 Environmental Impact Report. Amec Foster Wheeler to contact R.J. Burnside to obtain the Block 40-3 Environmental Impact Report.
- vi. Mark Heaton advised of the Embleton Sand Plain that exists south of the Credit River crossing will provide opportunity for infiltration practices.
- vii. Matt Britton indicated that the drainage area to CSP Arch Culvert C7 located near the Lionhead Golf Club entrance appears to have been reduced almost entirely. Region staff advised that if the culvert is proved to be unnecessary it should be removed.

**Amec Foster  
Wheeler**

Meeting Minutes prepared by:

Amec Foster Wheeler Environment & Infrastructure  
A division of Amec Foster Wheeler Americas Limited



Per: Matt Britton, EIT  
Water Resources Designer

MB/cc

c.c All Present

## Minutes

**Date:** July 27<sup>th</sup>, 2017  
**File #:** TP115085  
**Meeting Date & Time:** July 11<sup>th</sup>, 2017  
**Meeting at:** Region of Peel Head Office, Room 4-830  
**Subject:** Mississauga Road Class EA  
Progress Meeting with MNRF and CVC

### Attendees:

Mark Heaton – MNRF	Jakub Kilis – CVC
Rebecca Stewart – CVC	Kaitlyn McGlade – CVC
Gino Dela Cruz – Region of Peel	Neal Smith – Amec Foster Wheeler
Steve Chipps – Amec Foster Wheeler	Matt Britton – Amec Foster Wheeler
Jason Stahl – Amec Foster Wheeler	

### MATTERS DISCUSSED

### ACTION BY:

#### Introduction

- 1) The purpose of the meeting was to review the current preliminary design for Mississauga Road to solicit feedback, and to review the current status of the SWM modelling for the addendum section.

#### Project Update

- 2) Amec FW had recently met to review the preferred alternative with the various groups of the Region. Some minor comments were identified, however the same plan presented to the Region was provided at the meeting for MNRF and CVC review.
- 3) The following upcoming milestones were identified to CVC/MNRF:
  - a. PIC #2 – Fall 2017
  - b. File ESR – End of 2017

#### Review of Preliminary Design (Financial Drive to Queen Street)

- 4) The preliminary design was reviewed by Amec FW. The following key aspects were identified:
  - a. Smaller overall footprint for 6-lane road when compared to the standard Regional cross section:
    - i. Through lane widths reduced from 3.65m to 3.40m

**PLEASE NOTE:** If there is any comment or amendment to be made to these meeting notes, they should be brought to the notice of Amec Foster Wheeler within five (5) business days of issue and confirmed in writing.

## MATTERS DISCUSSED

**ACTION BY:**

- ii. Curb lane width reduced from 3.75m to 3.50m
  - iii. Boulevard width reduced from 3.50m to 1.50m
  - iv. Localized reduction in multi-use trail width from 3.00m to 2.40m
  - v. Median widths minimized from 5.50m to 2.0m (with some locations 0m)
  - b. The Regional standard 45.0m right-of-way and 50.5m at intersections will be applied to ensure adequate property is available for construction;
  - c. Transit will be facilitated by bus bays/pads at Queen Street, Embleton Road, and Lionhead Golf Course entrance;
  - d. Multi-use trail will be provided on both sides of Mississauga Road, except along the west side from Embleton Road to Queen Street;
  - e. Potential buy-out at #8837 Mississauga Road may facilitate space for some LID infrastructure, and
  - f. New retaining wall along east side from Credit River structure to Embleton Road.
- 5) CVC indicated to further reduce the footprint in the floodplain, the Active Transportation infrastructure should be consolidated to one side only. Amec FW indicated that this contradicts the Region's Active Transportation Master Plan, along with the goals of the Public Health group to provide multi-use trails on both sides. Further discussion will be completed between Amec FW and the various Regional groups.
- 6) CVC indicated that the retaining wall between the Credit River structure and Embleton Road would need to be analyzed in detail for the Class EA. The following technical specialists were identified to review the potential wall location: Fluvial Geomorphologist, Water Resources, and Structure Engineering.
- 7) CVC noted that the path along the Credit River does not have any official status. It is not anticipated to be needed until the approvals from the private properties are achieved.
- 8) MNRF noted that the proposed design would further impede access to the Credit River (a public waterway). It was indicated that as part of the *Public Lands Act*, access is required to allow for fish restocking and recreational uses (canoe, kayak, etc.). In addition, a parking area near the Credit River is required (similar to the crossing of the Credit River at Bovaird Drive). The design needs to meet the conditions of the Act, and approvals will be required from the relevant group at MNRF.

**Amec FW /  
Region**

### Credit River Structure

- 9) A number of alternatives have been considered by Amec FW for the structure, and the current preference is to fully replace the structure due to the following:

Continued...

Meeting Date: July 11<sup>th</sup>, 2017

## MATTERS DISCUSSED

ACTION BY:

- a. The existing structure was built in 1968, with a full deck replacement and minor girder repair in 2006;
  - b. Assuming the widening project is completed by 2022, the bridge will be nearing the end of its design life;
  - c. The existing structure only conveys the 100 year Storm Event, with the Regional Storm overtopping the structure by 1-2m;
  - d. Based on a sensitivity analysis completed by the Amec FW Water Resources group, widening the existing structure will adversely affect the upstream water elevations, which would require sign-off from multiple landowners (which CVC noted they would not support), and
  - e. Increasing the deck elevation by 1-2m will lower upstream water elevations.
- 10) CVC generally acknowledged the full replacement option, pending review of the various technical documentation justifying the full replacement. CVC requested that the technical documentation be provided for review to confirm their acceptance of the full replacement alternative.
- 11) MNRF reiterated that the design should protect public access requirements including a parking area, recreational use access for canoes and kayaks, and a fish restocking zone. Amec FW will review further with the Region and will advise.

**Amec FW /  
Region**

### Review of Addendum SWM Model

- 12) Amec FW reviewed the status of the pre-development, existing, and future conditions PCSWMM models to address the various issues discussed as part of previous calls. The following was highlighted:
- a. Amec FW has taken a 'step-back' approach, where the modelling for the road started from a 2-lane configuration (pre-development);
  - b. The next step was to apply the 4-lane configuration (existing conditions), but apply the recently approved SWM criteria;
  - c. Then the existing/under construction LID systems at Bovaird Drive and Queen Street were added;
  - d. The PCSWMM models are preliminary and still in the development stage;
  - e. For the section of Mississauga Road from Bovaird Drive to just north of Williams Parkway (with the 4-lane config.):
    - i. Up to the 100 year storm event, existing peak flows exceed pre-development flows;
    - ii. During less frequent storm events, peak flows are too large to be handled by the storm sewer infrastructure, and
    - iii. There is a need to upgrade the existing system for the 6-lane roadway, and to add additional LID features to accommodate the 6-lane roadway.



**MATTERS DISCUSSED**

**ACTION BY:**

- f. From just north of Williams Parkway to Williams Parkway
  - i. The minor system runoff is captured in the storm sewer, with the major system conveyed overland to the Credit River;
  - ii. Post-to-pre target is being met for the existing conditions (4-lanes)
- g. From Williams Parkway to Queen Street
  - i. The minor system runoff is captured in the storm sewer, with the major system conveyed overland to the Credit River;
  - ii. Post-to-pre target is not being met for the existing conditions (4-lanes, with some portions at 6-lanes), and
  - iii. Additional widening to 6-lanes will make the condition worse
- h. Pond W1
  - i. The pond was designed assuming upstream lands had a 33% impervious level;
  - ii. Amec FW has modelled the upstream lands assuming a 65% impervious level;
  - iii. The preliminary results have identified a 10-15% increase in storage requirements for the various storm events.

13) MNRF noted that Pond W1 has been recently scheduled for a clean-out. Amec FW to contact the City of Brampton for more information, and to discuss the identified issue with the SWM Pond.

**Amec FW**

Meeting Minutes prepared by:

Amec Foster Wheeler Environment & Infrastructure  
A division of Amec Foster Wheeler Americas Limited



Per: Jason Stahl, P. Eng.  
Project Engineer

JS

# Minutes

**Date:** October 6<sup>th</sup>, 2017  
**File #:** TP115085  
**Meeting Date & Time:** September 13<sup>th</sup> @ 1:30pm  
**Meeting at:** Region of Peel Head Office, Room 4-910  
**Subject:** Mississauga Road Class EA  
Progress Meeting with MNRF and CVC

## Attendees:

Mark Heaton – MNRF	Jakub Kilis – CVC
Rebecca Stewart – CVC	Kaitlyn McGlade – CVC
Asha Saddi – Region of Peel	Sargon Sifo – Region of Peel
Anthony Zois – Region of Peel	Neal Smith – Amec Foster Wheeler
Steve Chipps – Amec Foster Wheeler	Matt Britton – Amec Foster Wheeler
Jason Stahl – Amec Foster Wheeler	

## MATTERS DISCUSSED

## ACTION BY:

### Introduction

- 1) The purpose of the meeting was to review the current preliminary design for Mississauga Road to solicit feedback, and to review the recommendations of the SWM modelling for the addendum section.

### Project Update

- 2) The report for the addendum section (Bovaird Drive to Queen Street) has been completed, and will be filed once the document is finalized.
- 3) For the Schedule 'C' section, the following was noted
  - a. TAC #2 is scheduled for October 25
  - b. PIC #2 is scheduled for November 15
  - c. The following documents are anticipated to be completed in advance of the above:
    - i. Natural Environment Terrestrial and Aquatic Proposed Conditions mapping;
    - ii. Drainage/SWM Report;
    - iii. Assessment Table for the Credit River crossing, and

**PLEASE NOTE:** If there is any comment or amendment to be made to these meeting notes, they should be brought to the notice of Amec Foster Wheeler within five (5) business days of issue and confirmed in writing.

**MATTERS DISCUSSED**

**ACTION BY:**

- iv. Memo outlining the various design parameters used to complete the 6-lane arterial road design.

**Review of SWM recommendations for Addendum**

- 4) A review of the recommendations made by the Amec FW SWM report for the Addendum section was completed. The following was noted:
  - a. The section of Mississauga Road draining to Huttonville Creek will require two (2) underground storage units to provide storm water detention storage. Orifice plates located on the control manholes adjacent to Culvert C4 must be reconfigured;
  - b. For the same section of roadway, an infiltration trench is required on the west side of Mississauga Road from Ostrander Boulevard to Bovaird Drive;
  - c. Flow splitter devices are required within the catchbasins to divert the 25mm storm event into the infiltration trench;
  - d. The section of Mississauga Road draining to SWM Facility H3 is sufficiently sized to provide quality and quantity controls for the 6-lane configuration, and
  - e. For SWM Facility W1, retrofit is required to control post-development release rates, and an infiltration trench is recommended to reduce the future condition peak flows from Mississauga Road.
- 5) The comments provided by CVC via email were reviewed. Comments 1-4 are straightforward and were not discussed in detail. However, Comment 5 will require adjustments to the PCSWMM model to reflect the 2009 report. Amec FW will ask the City to confirm the 2009 report is the final report for SWM Facility W1. Comment 6 will be addressed via the outcome of the model revision to address Comment 5.

**Review of Preliminary Design (Financial Drive to Queen Street)**

- 6) Amec FW had a revised design plan available. The following was noted:
  - a. Modifications were completed to provide a refuge area for turning vehicles to/from 8947, 8949, and 8951 Mississauga Road;
  - b. Addition of a 2.0m wide flush median south of the Terrace on the Green driveway;
  - c. Limits of grading are now identified on the plan, and
  - d. Proposed property lines are now shown on the plan.
- 7) Amec FW reiterated CVC's previous comment about limiting the multi-use trail on one side only. It was noted that a large community centre is planned in close proximity to the study area (the exact location would be confirmed). As a result, significant pedestrian movement is expected on both sides of Mississauga Road. CVC acknowledged this,

## MATTERS DISCUSSED

## ACTION BY:

but noted that they would reserve approval until the technical data is provided to them for review.

- 8) MNR's concern regarding public access to fulfill the requirements under the Public Lands Act was discussed. The following was noted:
  - a. Prior to widening from 2 lanes to 4 lanes, Mississauga Road was an access point (particularly on the south side) to the Credit River;
  - b. With the 4 lane widening, a fence was erected which restricted access to the Credit River;
  - c. The work completed for the 4-lane widening was not approved by the Public Lands Act process;
  - d. The Act requires that access is provided to public lands. It is not specific to the requirements of the access (ie. AODA compliance, max slopes, parking requirements, etc.);
  - e. Generally all road works within the Region are preventing/eliminating access to the Credit River. Steeles Avenue was given as an example, and
  - f. Some concerns regarding liability was expressed by the Region. MNR noted that liability would fall to the individuals accessing the river (an example outside of the study area was given).

**Post Meeting Note:** MNR provided the following link to help clarify the requirements of providing access to public lands:

<https://www.ontario.ca/page/crown-land-management-policies>

## Credit River Structure

- 9) The preliminary general arrangement drawing for the replacement of the Credit River structure was presented at the meeting. The following was noted:
  - a. The middle span of the new 3-span structure will increase in span from 22.86m to 46.0m;
  - b. The longer middle span will allow the new piers to be placed outside of the low flow channel/water;
  - c. The new piers and abutments would be drilled caissons, and would be completed outside of the main channel limits;
  - d. The two end spans would increase from 22.86m to 29.0m
  - e. Total span increase of 34.4m (from 68.58m to 103m), and
  - f. The wider structure will improve conveyance, provide more space for meandering, and would address fluvial geomorphic concerns due to the current bridge config which is restricting flow (causing channel widening downstream and bed scour).
- 10) Both CVC and MNR were generally in agreement with the proposed structure configuration. However, CVC noted that they would reserve approval until the technical data is provided to them for review.

Continued...

Meeting Date: September 13<sup>th</sup>, 2017

Meeting Minutes prepared by:

Amec Foster Wheeler Environment & Infrastructure  
A division of Amec Foster Wheeler Americas Limited

A handwritten signature in black ink, appearing to read "J. Stahl". The signature is written in a cursive, slightly slanted style.

Per: Jason Stahl, P. Eng.  
Project Engineer

JS

**Saddi, Asha**

---

**Subject:** FW: Mississauga Road and Williams Parkway - Zum Bus Station PTE Grading

**From:** Lafleur, Chris [mailto:Chris.Lafleur@brampton.ca]  
**Sent:** August 3, 2018 10:20 AM  
**To:** Lee, Arthur  
**Cc:** Nieuwenhuysen, Bob; Tatla, Manvir; Saddi, Asha  
**Subject:** Re: Mississauga Road and Williams Parkway - Zum Bus Station PTE Grading

Thanks Arthur.

Just a terminology thing.

The notes are acceptable.

chris

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**From:** Lee, Arthur <arthur.lee@peelregion.ca>  
**Sent:** Friday, August 3, 2018 10:17:51 AM  
**To:** Lafleur, Chris  
**Cc:** Nieuwenhuysen, Bob; Tatla, Manvir; Saddi, Asha  
**Subject:** RE: Mississauga Road and Williams Parkway - Zum Bus Station PTE Grading

Chris,

Sorry I didn't mean Nearside in respect to the intersection but to have the MUT on the side between the curb/splashpad and bus shelter.

Regards,

Arthur

**From:** Lafleur, Chris [mailto:Chris.Lafleur@brampton.ca]  
**Sent:** August 3, 2018 10:04 AM  
**To:** Lee, Arthur  
**Cc:** Nieuwenhuysen, Bob; Tatla, Manvir; Saddi, Asha  
**Subject:** Re: Mississauga Road and Williams Parkway - Zum Bus Station PTE Grading

Hi Arthur

Can you clarify point #1? Nearside? The Zum station is proposed farside.

chris

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From: Lee, Arthur  
Sent: Friday, August 3, 9:33 AM  
Subject: RE: Mississauga Road and Williams Parkway - Zum Bus Station PTE Grading  
To: Laffleur, Chris  
Cc: Nieuwenhuysen, Bob, Tatla, Manvir, Saddi, Asha

Hi Chris,

As per our meeting earlier this week regarding designs for bus pads and shelters against MUT we have agreed on the following actions as summary:

1. MUT against on the near side of the ZUM station beside the bus bay curb is acceptable in order to minimize grading impacts
2. Narrow proposed 3.0m MUT to 2.4m to accommodate a 0.6m coloured impressed concrete splashpad between the curb and MUT
3. Provide "shark teeth" paint markings on both sides of the MUT approaching the bus shelter to warn cyclists of ZUM customers waiting
4. Provide 2.5x15m concrete sidewalk wings on both sides of the passenger waiting pad

Please let me know if I've missed anything or if you have anything you'd like to add.

Thanks and Regards,



**Arthur Lee**

Technical Analyst, Infrastructure Programming and Studies

Transportation, Public Works

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th

Floor, Brampton, ON L6T 4B9

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[peelregion.ca](http://peelregion.ca)

# Minutes

**Mississauga Road EA Addendum from 300m north of Queen Street to 100m south of Bovaird Drive  
Technical Advisory Committee Meeting**

**Date: Friday, September 7, 2018**

**Time: 1:00 p.m. – 3:00 p.m.**

**Venue: Region of Peel Offices, Peel Conference Room, Suite B, 10 Peel Centre Drive, Brampton**

**Present: see table attached**

#	DESCRIPTION	ACTION
1	<p><b>Welcome and Introductions</b></p> <ul style="list-style-type: none"> <li>The Region Project Manager welcomed all TAC members and explained that the purpose of the TAC meeting was to review the proposed preliminary design for the Mississauga Road EA Addendum.</li> <li>Round table introductions took place.</li> </ul>	
2	<p><b>Project Overview</b> The Region Project Manager provided a project overview:</p> <p><b>Study Area</b> Mississauga Road is a north-south arterial road in the City of Brampton. It is designated a suburban connector and is a primary truck route. The study limits are 300m north of Queen Street to 100m south of Bovaird Drive.</p> <p>Immediately south of the study area is the Region of Peel Schedule C EA for the 4-6 road widening on Mississauga Road from 300m north of Financial Drive to 300m north of Queen Street.</p> <p>The EA Addendum report and 30 per cent proposed preliminary design was conducted as an in-house project whilst the updates to the 2006 technical studies were completed by the Consultant working on the Mississauga Road EA section, south of the EA Addendum study limits.</p> <p><b>Background</b> The 2006 Schedule C EA for Mississauga Road from Queen Street to Bovaird Drive proposed a 4 lane widening to anticipate growth by 2015 and also recommended a 6 or 7 lane widening after 2015. In 2012 the Region's Long Range Transportation Plan Update also recommended widening Mississauga Road to six lanes and improving infrastructure for transit and active transportation facilities. The addition of the two lanes to this section of Mississauga Road is the subject of the EA Addendum.</p> <p><b>Why an Addendum is Required</b> An addendum is completed by a Municipality if it is not feasible to implement the project in the manner outlined in the original Environmental Study Report (ESR). The Municipal Engineer's Association (MEA) Class EA process provides that if there is a significant change to a project or a change</p>	

**Public Works**



	<p>in the environmental setting of the project after the ESR has been filed, an Addendum is required to be issued. The Addendum report is to describe the circumstances of the change, the environmental implications of the change and any mitigation measures for potential negative environmental impacts.</p> <p>Due to environmental impacts associated with Huttonville Creek for Redside Dace on the east side, the west side of Mississauga Road will be designed and constructed to support the ultimate six lane configuration. Property requirements identified for the ultimate six lane design also require the need for an EA Addendum.</p> <p><b>Policies, Studies and Timeline</b>  Shale protection policies in north-west Brampton - lands in north-west Brampton are protected for shale extraction in advance of urban development. This impacts any work which will take place on the west side for the proposed widening. This matter is currently subject to consultations with stakeholders and the Province.</p> <p>The GTA West study (cancelled February 2018) – the proposed 4-6 widening for the Addendum section on Mississauga Road is not dependent on the GTA West study. Region of Peel traffic analysis showed a need for Mississauga Road to be widened to six lanes independent of the GTA West Study. The Region of Peel Long Range Transportation Plan Update provides the need and justification for the widening on Mississauga Road. The 2006 ESR also recommended a road widening after 2015.</p> <p>Timeline - the draft Addendum report will be circulated to agencies end of September/October for review and comments and a Notice of Study Completion and File Addendum Report will go out in November 2018. The anticipated construction date for the proposed 4-6 lane widening is 2025.</p>	
3	<p><b>Group Discussion – proposed preliminary design review</b>  The Region Designer explained that the right-of-way for the proposed ultimate six lane design is 50.5m, design speed of 90km/h and a posted speed of 80km/h. The lane widths are currently 3.75m (through) and 4.25m (curb). The proposed lane widths are 3.65m (through), 3.75m (curb) and 3.5 (turn lane).</p> <p>Future speed reduction - Traffic Operations explained that the posted speed from 400m north of Queen Street through to Mayfield Road is under consideration for speed reduction from 80km/h to 70km/h and a reduction design speed from 90km/h to 80km/h. This will be subject to Council approval. A report is expected to go to Council next year. A suggestion was made on the timing of the Council report to align with the completion of construction taking place north of the study limits so that the new approved speed limit could be in effect at the same time construction is completed, this way the public would not be inconvenienced with changes in the speed limit.</p>	

**Public Works**

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<p>Addendum process - the Region explained that the addition of two lanes requires an Addendum to the 2006 ESR. Only the items in the Addendum are open for review. A Public Information Centre (PIC) was held last year for the Addendum section on the same day the Region held PIC No.1 for the EA section, immediately south of the Addendum section study limits.</p> <p><b>Post meeting comment:</b> Reference page A80-81 of the MEA manual.</p> <p>ZUM and transit facilities - the Region Designer confirmed that the study limits included a ZUM corridor with bus bays. Region staff had met with the City of Brampton and confirmed bus stops at Mississauga Road/Williams Parkway and Brampton transit stops south of Williams Parkway and Beacon Hill Drive on the west side.</p> <p>Active transportation facilities - the west side is currently a rural cross section with ditches and no AT. MUT is proposed to be added to the west side where adjacent development is occurring. The MUT will also connect to the MUT to the north and south of the study limits.</p> <p>Settlers Field/Beacon Hill Drive – The Region confirmed that the installation of temporary 4-way signals was currently being completed at the intersection of Settlers Field/Beacon Hill Drive and Mississauga Road due to pedestrian safety concerns. Permanent signals will be installed when construction takes place.</p> <p>Stormwater Management - the stormwater infrastructure proposed are two underground storage tanks within the west boulevard area of the ultimate right-of-way. To meet water quality control, LID in the form of infiltration trenches will be located along the length of the proposed right-of-way from approximately Ostrander Blvd. to Bovaird Drive.</p> <p>Roads Operations expressed concern over cleaning the storage tanks.</p> <p>CVC was content with the proposed measures being taken and confirmed that there are no regulated watercourse crossings along Mississauga Road within the project study limits.</p> <p>The Region confirmed that the stormwater report will be circulated with the draft Addendum report.</p> <p>Lane widths - Roads Design &amp; Construction explained the Transportation Association of Canada (TAC) had reduced lane widths recently. The proposed Addendum design showed wider lane widths and it had been agreed that the new TAC standards would be used at detailed design so there was no need to change the proposed design at this stage. The utility design on the west side also has to be reviewed.</p> <p>Traffic Operations pointed out that reduced lane widths and lower speeds go together. The construction taking place north of these study limits will</p>	<p>Regional Project Manager</p>
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	<p>align with this Addendum section to keep the lane width consistency.</p> <p>The Region confirmed that the design criteria will be circulated with the draft Addendum report based on the current posted speed limit of 80 km/hr.</p> <p>Wastewater infrastructure - Wastewater has a 1200mm sewer in detailed design and would like it to be included in the detailed design review of this Addendum project.</p> <p>Water and Wastewater infrastructure - Water Wastewater Program Planning &amp; Compliance requested that water and wastewater infrastructure be added to the proposed design, using Regional standards.</p> <p>Snow storage - Roads Operations and Maintenance expressed concern over sufficient room being available for snow storage. It was requested that in the detailed design stage additional ROW width gained from narrowing lane widths, be assessed for additional boulevard width from back of curb to outside edge of sidewalk/MUT to accommodate additional snow storage where possible.</p> <p>Development plans - Realty confirmed that no submissions had been received to review for the west side at Royal West Drive and Mississauga Road through the impact agenda process.</p>	<p>Regional Project Manager</p> <p>Region Roads Designer to include on the proposed design</p>
4	<p><b>Next Steps</b></p> <ol style="list-style-type: none"> <li>1. Circulate the draft meeting notes for comments.</li> <li>2. Circulate the draft EA Addendum report to agencies for review and comment.</li> <li>3. 30 day public review period and file the EA Addendum report.</li> </ol>	

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<b>Attendees</b>	
<b>Region of Peel – Infrastructure Programming &amp; Studies</b>	Asha Saddi (Project Manager), Arthur Lee (Designer)
<b>Region of Peel – Traffic Engineering</b>	Nathan Sinka (Traffic Operations), and Seema Ansari (Traffic Safety)
<b>Region of Peel – Transportation System Planning</b>	Sabbir Saiyed (Manager)
<b>Region of Peel – Roads Design &amp; Construction</b>	Bob Nieuwenhuysen (Manager)
<b>Region of Peel – Sustainable Transportation</b>	Manvir Tatla (Project Manager)
<b>Region of Peel – Realty Property Acquisitions</b>	Tony Zois
<b>Region of Peel – Public Health</b>	Matthew Aymar (Analyst) and Natalie Lapos (Supervisor)
<b>Region of Peel – Water Wastewater</b>	Mark Knuckle (Acting Program Manager) and Kamal Adhikary (Specialist)
<b>Region of Peel – Roads Operations &amp; Maintenance</b>	Mark Crawford (Manager)
<b>CVC</b>	Rebecca Stewart (Analyst) and Sarah Labrie (Ecology)
<b>City of Brampton</b>	Ghazanfar Mohammad

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**Addendum to the  
Municipal Class Environmental Assessment for  
2-4 widening on Mississauga Road - Queen Street  
West to Bovaird Drive West (2006)**

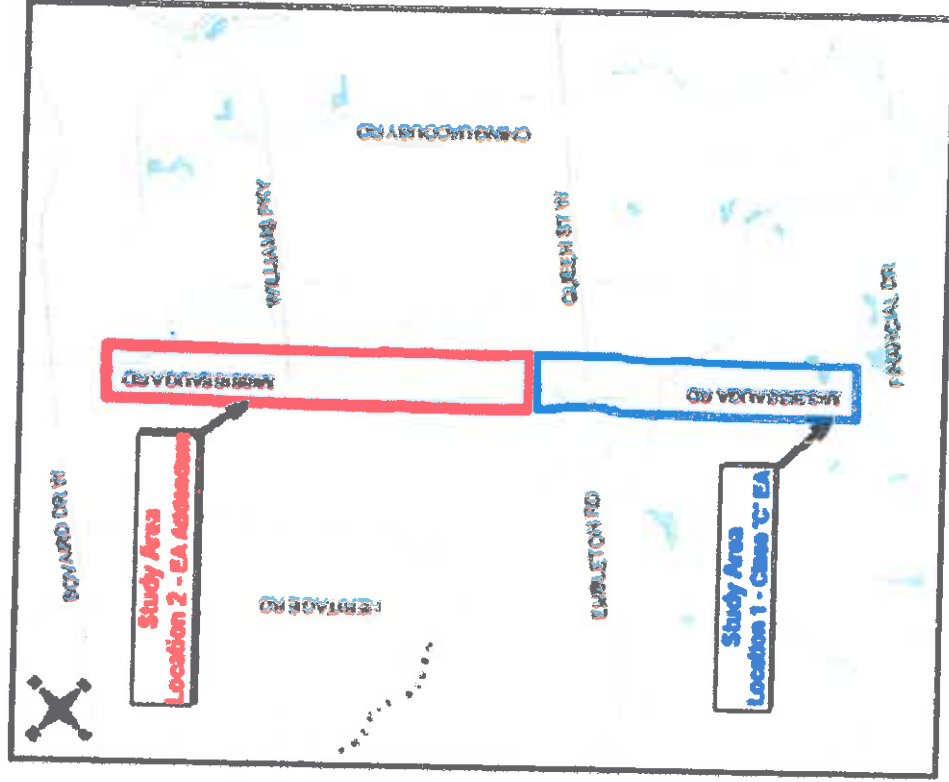
**Technical Advisory Committee  
September 7, 2018**



# Agenda

1. Welcome and Introductions
2. Project Overview
3. Group Discussion – Design Review
4. Next Steps

# Study Area

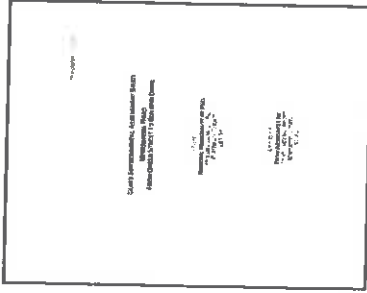


- Mississauga Road in Brampton
- 300m north of Queen Street to 100m south of Bovaird Drive
- North-south arterial road
- Designated a Suburban Connector route
- Designated as a Primary Truck Route

# Background

## Mississauga Road EA - Queen Street to Bovaird Drive (2006)

- Proposed 4 lanes will accommodate anticipated growth to 2015
- A 6 or 7 lane roadway will be required after 2015



## Long Range Transportation Plan Update (2012)

- Widen Mississauga Road to six lanes
- Improve infrastructure:
  - Transit
  - Active Transportation facilities





## Why an Addendum is Required

- If there is significant modification to the project or change in the environmental setting of the project which occurs after the filing of the ESR, an Addendum is required to be issued.
- The Addendum will describe the circumstances of the change, the environmental implications of the change and any mitigation measures for potential negative environmental impacts.
- Due to environmental impacts associated with Huttonville Creek (Redside Dace) on the east side the west side will be designed and constructed to support the ultimate 6 lane configuration.
- To design for the ultimate 6 lane an EA Addendum is required for the identification of property requirements.

# Policies, Studies and Timeline

**Policies** - Shale protection in NW Brampton

**GTA West Study** - cancelled

## **Timeline**

1. Circulate draft Addendum report for review – September 2018
2. Notice of Completion and File Addendum Report – November 2018
3. Construction – 2025



# Group Discussion - Design Review

# Proposed Preliminary Design

Roadway	Existing	Proposed	Future
<b>ROW</b>	45m	50.5m	50.5m
<b>Posted Speed</b>	80km/h	80km/h	70km/h (subject to Council approval)
<b>Design Speed</b>	90km/h	90km/h	80km/h (subject to Council approval and DD)
<b>Lane Width</b>	3.75 (through lanes) 4.25 (curb lane)	3.65m (through lanes) 3.75m (curb) 3.5 Turn lane	Determined at DD and new TAC guidelines

## Next Steps

1. Circulate the draft meeting notes for comments
2. Circulate the draft EA Addendum report to agencies for review
3. 30 day public review period and file the EA Addendum report



## Contact

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Study Website: <http://www.peelregion.ca/pw/transportation/assessment/ea-mississauga-rd-2proj.htm>