

HIGHWAY 7 & 8

TRANSPORTATION CORRIDOR PLANNING & CLASS EA STUDY



Ministry of
Transportation

Welcome to Public Information Centre (PIC) #6

Highway 7&8 Transportation Corridor Planning and Class Environmental Assessment Study

Wednesday July 24, 2013

Shakespeare & District Optimist Hall
3976 Galt Street, Shakespeare

Thursday July 25, 2013

Stratford Rotary Complex, Community Hall B
353 McCarthy Road, Stratford

Wednesday August 14, 2013

Wilmot Recreation Complex
1291 Nafziger Road, Baden

5:00 p.m. to 9:00 p.m.

Brief presentations at 5:30 p.m. and 7:30 p.m.

Welcome!



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- Please sign in.
 - Please indicate if you would like your name to be added to the study mailing list to receive updates and notices regarding the study.
- Comment sheets are available to record your comments and suggestions.
- Materials available tonight:
 - For Viewing – Recommended Plan, PIC reference materials - study reports / plans, background materials
 - Handouts – study newsletter

Public Information Centres (PICs) are held at key stages of the Class Environmental Assessment (EA) Study. PICs are held to provide stakeholders with the opportunity to be engaged in the process through interaction with the study team and the submission of comments.

Accessibility



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“Under the Integrated Accessibility Standards Regulation (2011), the Ministry of Transportation, Ontario (MTO) is committed to excellence in serving all customers and to ensuring the Class Environmental Assessment process is accessible to all participants. This Public Information Centre incorporates the following accessibility features:

- Accessible location, including ramps, elevators, accessible washrooms and parking
- For people requiring assistance, project team members will:
 - Verbally explain presentation board content
 - Assist with written submission of comment forms
- Reading aids are available, including magnifying glasses
- Presentation boards and displays printed in large, legible font
- Materials are available in print and electronic format, upon request
- We welcome people with disabilities and their service animals

We welcome your feedback related to the accessibility of this event. Please speak to one of the study team members or contact Charles Organ at 519-873-4591 or via email at chuck.organ@ontario.ca with your comments.

Purpose of the Study



The Highway 7&8 Transportation Corridor Planning and Class EA Study is being undertaken to identify and address the long-term (2031) transportation needs for the Analysis Area and to prepare a preliminary design for the provincial roadway components of the recommended plan.

Municipal planning forecasts indicate that the population and employment in New Hamburg and Baden will more than double between 2001 and 2031. This increased population and employment, and the long term vision for the Region of Waterloo, will have a significant influence on the outlying transportation systems that feed into the study area. Traffic volumes in the study area will continue to increase at rates that will require capacity and operational expansions to Highway 7&8 within the 20 year planning timeframe.

A detailed traffic analysis, utilizing origin destination travel survey information and 103 travel zones developed and refined specifically for the study area, determined that from Stratford to New Hamburg there will be a road capacity deficiency in the area road network (includes provincial and municipal roadways) of one lane in both the east and west directions by 2031 and that the required additional lanes should be provided on a single 4-lane provincial highway to improve traffic safety. West of Stratford there is not a capacity deficiency, but there is a need to link the provincial highway system. Highway 7&8 is a significant part of the overall provincial highway network, playing a key role in linking larger communities and supporting economic prosperity across Ontario.

The task of managing a sustainable provincial highway network includes planning for the future. The study is therefore seeking environmental clearance that will allow the recommended, long-term plan for Highway 7&8 to be protected, and over the interim, assist MTO in making smart investment decisions until the highway expansion is programmed for construction. The recommended plan for Highway 7&8 will maintain its current functional classification and a posted speed of 80 km/h from Baden westerly to the east end of Stratford.

Purpose of PIC #6



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- Provide update on Highway 7&8 Transportation Corridor Planning Study
- Provide update on Study Process and Schedule
- Present and obtain comments and input on:
 - Recommended Plan
 - Evaluation Results for Preliminary Design Alternatives
 - Mitigation measures and strategies to address impacts
 - Next steps in the EA process
- The above noted material is draft and subject to change as a result of new information and comments provided by stakeholders. Following the review period, all comments received will be considered in finalizing the draft material.

Study Background



Transportation, Land Use and Economic Conditions in Analysis Area (PIC #1)

- Comprehensive overview of existing conditions
- Identification of transportation problems and opportunities
- Identification of environmental conditions and constraints



Analysis Area

Generation and Assessment of Area Transportation System Alternatives (PIC #2)

- Individual transportation planning alternatives do not address identified problems and opportunities
- Two combination alternatives were carried forward for further review
 - Transportation demand management (ridesharing / telecommuting), transit, widen existing highway
 - Transportation demand management (ridesharing / telecommuting), transit, local by-passes or new highway corridor
- Note: With respect to potential transit improvements, GO Transit is planning to extend rail service to the Kitchener-Waterloo area, with a layover site for trains located in Baden. VIA Rail has also indicated they may increase their rail service within the existing railway corridor south of Highway 7&8 in the future.

Develop Long List of Area Transportation System Alternatives								
'Do Nothing'	Local Transit*	TDM	TSM	Freight Rail*	Air Service*	Marine Service*	Inter-Regional Transit / Passenger Rail*	Provincial Highways/Transways*

Individual Alternatives

Develop Elements of Area Transportation System Alternatives and Group them into Combinations				
'Do Nothing'	'Combination #1'	'Combination #2'	'Combination #3'	'Combination #4'
Existing infrastructure and programmed improvements	Optimize Existing Network (all modes)	New/Expanded Non-Road Infrastructure + Elements from Combination 1	Widen Municipal Roads and/or Provincial Highways	New Provincial Highways/Transways + Elements from Combination 3
	Commuter Existing Local Transit, Interregional Transit, Passenger Rail, Freight Rail, Air Service, TSM, TSM	Local Transit, Interregional Transit, Passenger Rail, Freight Rail, Air Service	Elements from Combination 2 (Water Transport, Municipal Roads, Provincial Highways)	

Combination Alternatives



Preferred Corridor Alternative including area of expanded review of Shakespeare Route Alternatives

Corridor Alternatives (PIC #2B / #2C / #3)

- Long List of Corridor Alternatives
- Screening Process (to screen out significantly less desirable corridors)
- Short List of Corridor Alternatives
- Refinements to Factors, Sub-Factors, Criteria and Indicators
- Comparative Evaluation of Short List of Corridor Alternatives
- Preferred Corridor Alternative
- Expanded Corridor in Shakespeare Area (alignment alternatives re-examined on a "route" rather than a "corridor" basis)

Route Alternatives (PIC #3 / #3B)

- Route Alternatives generated for various sections of Preferred Corridor
- Broader range of Route Alternatives generated for Shakespeare Area
- Refinements to Factors, Sub-Factors, Criteria and Indicators for route selection

Route Alternatives



Study Background Cont'd...



Preferred Route Alternative (PIC #4)

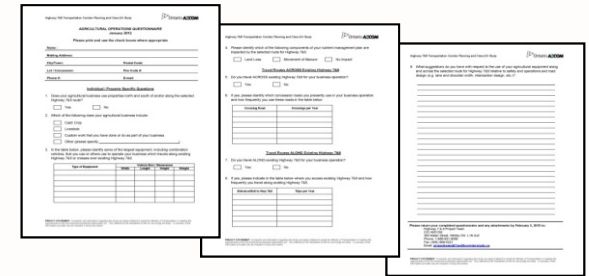
- Confirmation of Route Alternatives
- Assessment and Evaluation of Route Alternatives
- Identification of Preferred Route Alternative



Preferred Route Alternative

Agricultural Operations Questionnaire (Winter 2012)

- Objective was to obtain more specific information from agricultural producers to aid in the development of Preliminary Design Alternatives
- Three main components to questionnaire: Individual / property specific information; travel routes across Highway 7&8 and travel routes along Highway 7&8
- 55 completed questionnaires received

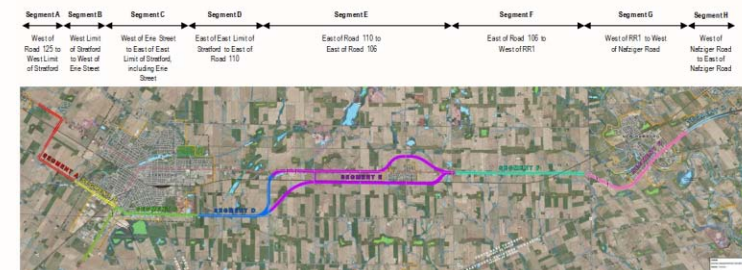


Agricultural Operations Questionnaire

Preliminary Design Alternatives (PIC #5)

- Preliminary Design Alternatives generated for each segment of the Preferred Corridor
- Broader range of Preliminary Design Alternatives generated for Shakespeare Area (examining previously preferred south bypass route and north bypass route at a higher level of detail)
- Evaluation process (including sub-factors, criteria and indicators) to be used to select a preferred Preliminary Design Alternative

The study area was divided into eight segments as shown on the plan below for the development of Preliminary Design Alternatives.



Preliminary Design Segments

Preliminary Design Alternatives



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Preliminary Design Alternatives were generated in accordance with provincial highway safety and design standards for the 'Rural Arterial' highway classification. The selected design criteria achieve the following objectives:

- Accommodation of long distance / inter-regional traffic and local traffic needs
- High emphasis on efficient operations and public safety
- High level of uninterrupted traffic flow at the specified speed limit
- Number of access points minimized and/or controlled to maintain long-term efficiencies
- Consistent arrangement of geometric design features that reinforce driver's confidence and expectancy

Preliminary Design Alternatives were generated according to a set of Guiding Principles developed in consideration of key study area issues and concerns, including:

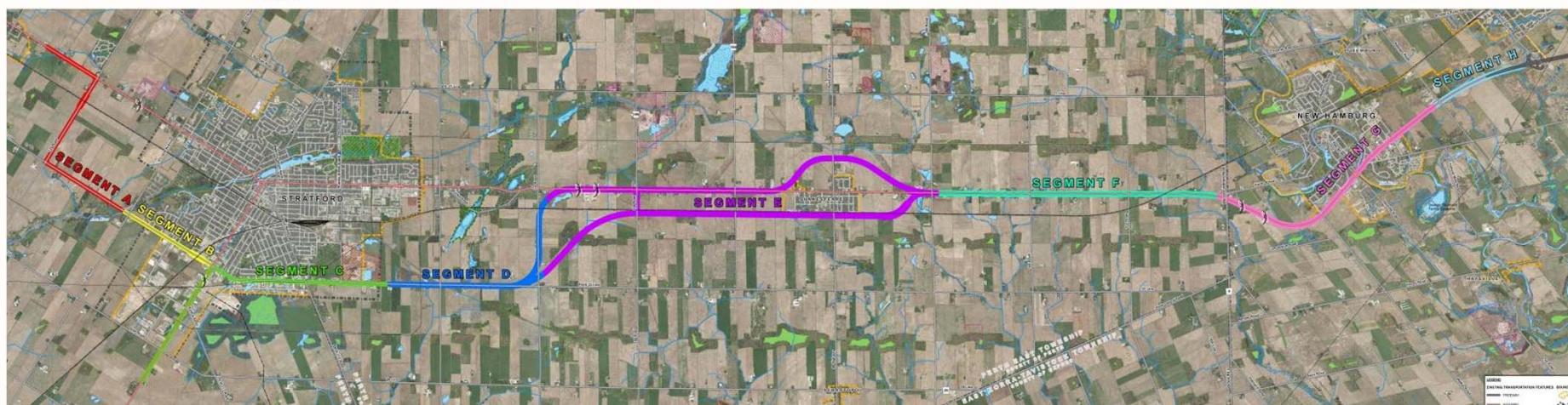
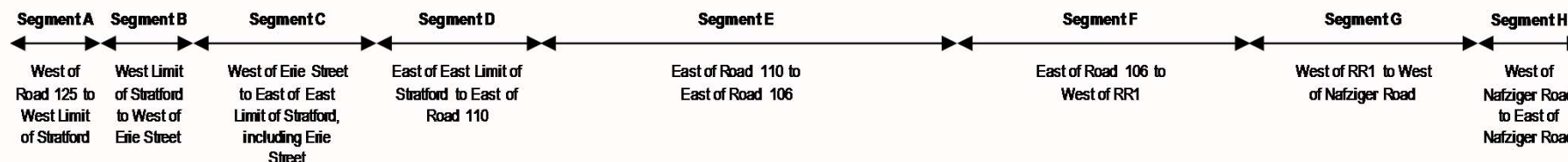
- Address study purpose to provide adequate long-term transportation capacity, and improved highway operation and safety
- Retain north/south connectivity for agricultural/other local users along all major crossing roads and provide direct access to Shakespeare from new route
- Improve long-term access to New Hamburg and retain good access to properties in Stratford along the selected route
- Grade separate the highway at railway crossings
- Protect long-term operation along the new route segment east of Road 110 to west of Road 106 by prohibiting private entrances

Preliminary Design Alternatives



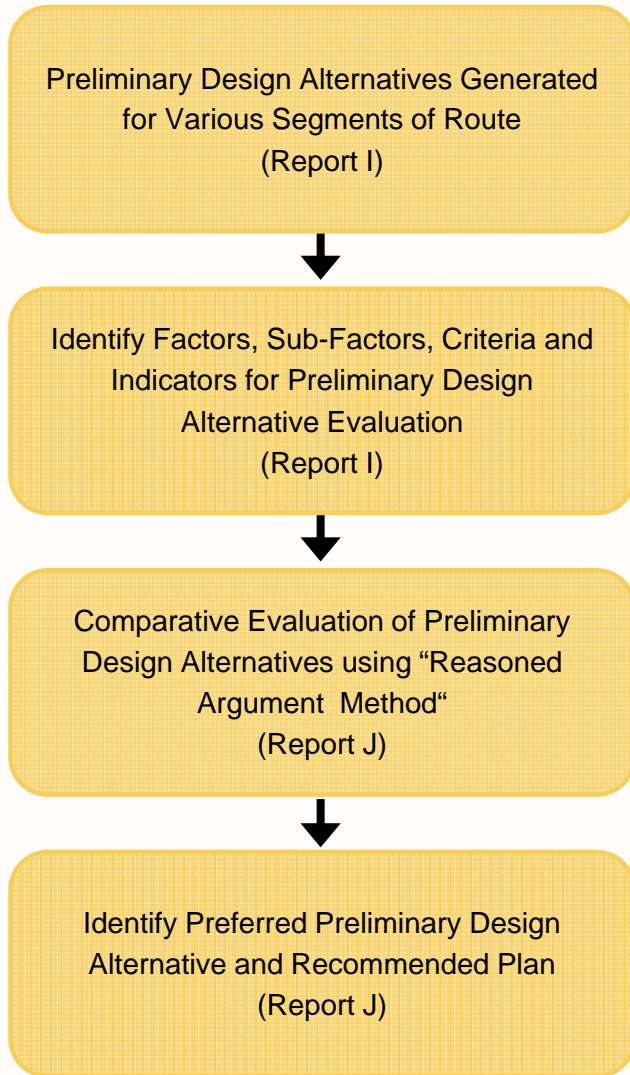
Preliminary Design Alternatives were generated to capitalize on the transportation and engineering opportunities present within each Preliminary Design segment. Alternatives were also generated to minimize design-related impacts and avoid significant environmental features.

In recognition of the varied environment and transportation requirements along the corridor, the study area was divided into eight segments for the development of Preliminary Design Alternatives, as shown below.



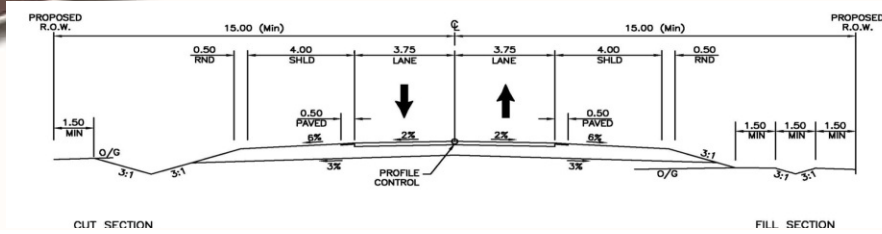
Preliminary Design Alternatives for roadway cross section and intersection treatments were presented for review and comment at PIC #5 and documented in Report I. Since PIC #5, the Preliminary Design Alternatives have been refined and comparatively evaluated and a Recommended Plan has been identified.

Evaluation of Preliminary Design Alternatives

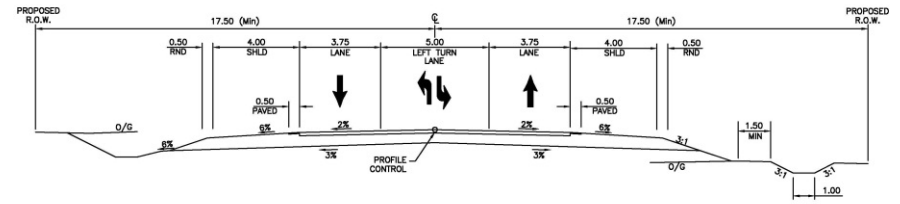


- Alternatives were evaluated using the Reasoned Argument method
- Segments D and E were evaluated together to identify a preferred Shakespeare Bypass alternative
- Assessment of Shakespeare Bypass alternatives was completed in three steps
 - North alternatives comparatively evaluated to identify a preferred north bypass alternative
 - South alternatives comparatively evaluated to identify a preferred south bypass alternative
 - Preferred north and south bypass alternatives comparatively evaluated to identify a preferred Shakespeare area bypass alternative
- A Shakespeare bypass alternative has been selected and a preferred cross-section and crossing road treatments have been identified for each segment.
- The assessment tables detailing the evaluation of Preliminary Design Alternatives are provided in Report J which is available for review on the reference table.

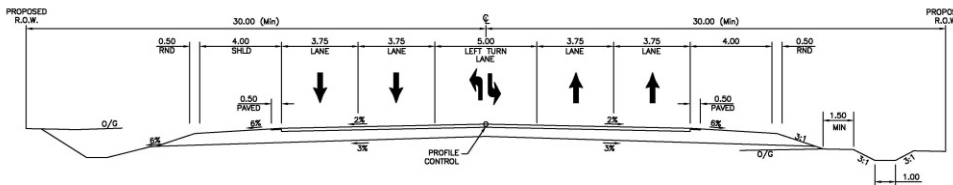
Recommended Plan Number of Lanes / Highway Cross Section



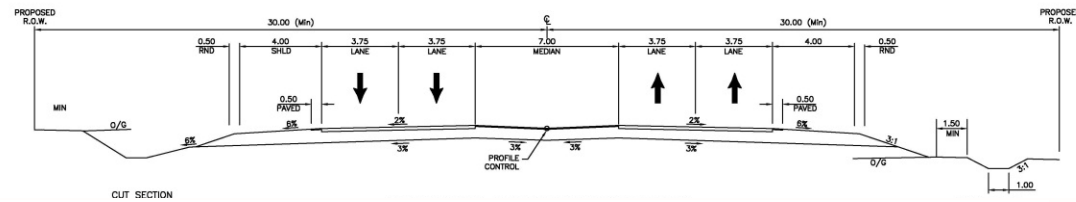
Segment A: 2-lane cross-section from Highway 8 / Road 125 to Road 125 / Perth Line 32



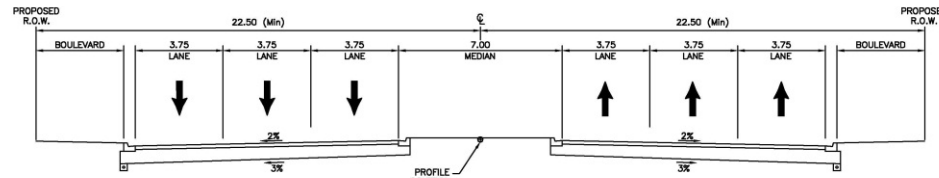
Segments A and B: 2-lane cross-section with 5 m two-way centre left turn lane from Road 125 to west of Erie Street



Segments C, D and F: 4-lane cross-section with 5 m two-way centre left turn lane from west of Erie Street to east of Road 110, including Erie Street, and from east of Road 106 to Regional Road 1



Segments E, G and H: 4-lane cross-section with 7 m median from east of Road 110 to east of Road 106, from Regional Road 1 to west of Peel Street intersection and from east of Hamilton Street intersection to east study limit



Segment G: 6-lane cross-section with 7 m median from west of Peel Street to east of Hamilton Street intersections



Recommended Plan

Crossing Road Intersection Treatments



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Signalized intersections at (note: stop sign control will be provided at intersections marked with asterisk until traffic conditions meet traffic signal installation criteria):

- Erie Street / Lorne Avenue
- Downie Street / Lorne Avenue
- Romeo Street / Lorne Avenue
- Embro Road / Erie Street *
- Line 29 / Erie Street *
- Road 111 / Line 33 *
- Road 110 / Line 33 *
- Road 109 / new Highway 7&8 *
- Road 109 / existing Highway 7&8 *
- Road 107 / new Highway 7&8
- Regional Road 1 / Highway 7&8
- Peel Street / Highway 7&8
- Hamilton Street / Highway 7&8

Stop controlled intersections, with stop signs on the crossing roads at:

- O'Loane Avenue / Line 32
- Freeland Drive / Lorne Avenue
- Queensland Road / Lorne Avenue
- Wright Boulevard / Lorne Avenue
- St. Vincent Street/ Lorne Avenue
- Road 106 / Highway 7&8
- Road 104 / Highway 7&8
- Road 102 / Highway 7&8
- Walker Road / Highway 7&8

Roundabouts at:

- Highway 8 / Road 125
- Road 125 / Line 32

Grade separation, where the side road crosses over Highway 7&8 with no highway access, at:

- Road 108 / New Highway 7&8

Cul-de-sacs at 6 locations:

- Monteith Avenue / Lorne Avenue
- Linton Avenue / Lorne Avenue
- Dunlop Place / Lorne Avenue
- Scott Street / Lorne Avenue
- Victoria Street / Highway 7&8
- Existing Highway 7&8 eastbound at east end of the village of Shakespeare (with slip-off provided westbound)

Interchange at:

- Nafziger Road / Highway 7&8

Recommended Plan: Segment A and Segment B



Segment A: West of Road 125 to West Limit of Stratford

The preferred alternative for Segment A consists of:

- 2-lanes with a 5m two-way centre left turn lane on Line 32;
- Roundabouts at both crossing roads on Road 125; and
- Stop sign control at O’Loane Avenue.

The key reasons this preliminary design alternative is preferred are:

- Centre left turn lane on Line 32 provides improved operational and safety performance with minimal footprint impacts to adjacent properties.
- Roundabouts provide the best bi-directional and uninterrupted flow where Highway 7&8 changes direction at Road 125.



Segment B: West Limit of Stratford to West of Erie Street

The preferred alternative in Segment B consists of:

- 2-lanes with 5m two-way centre left turn lane
- Stop sign control at Freeland Drive, Queensland Road, Wright Boulevard and St. Vincent Street
- Cul-de-sac at Monteith Avenue and Linton Avenue

The key reasons this preliminary design alternative is preferred are:

- Centre left turn lane on Lorne Avenue provides improved operational and safety performance with minimal footprint impact to adjacent properties.
- Recognizes urban cross section may be required to avoid frontage impacts to pioneer cemeteries.



Recommended Plan: Segment C



Segment C: West of Erie Street to East Limit of Stratford

The preferred alternative for Segment C consists of:

- 4-lanes with 5m two-way centre left turn lane on Lorne Avenue and Erie Street
- Signalized intersections at Erie Street / Lorne Avenue, Downie Street / Lorne Avenue, Romeo Street / Lorne Avenue, Embro Road / Erie Street and Line 29 / Erie Street
- Cul-de-sacs at Dunlop Place and Scott Street

The key reasons this preliminary design alternative is preferred are:

- Centre left turn lane on Lorne Avenue and Erie Street provides improved operational and safety performance and maintains current direct access to and from highway for commercial / industrial and other properties fronting the highway (i.e. no out of way travel).
- Maintains current emergency vehicle access to and from highway.
- Minimizes footprint impacts to land and buildings on adjacent properties.
- Provides best overall level of service for projected travel demands.
- Best supports pedestrian / cyclist movements within and across right-of-way.



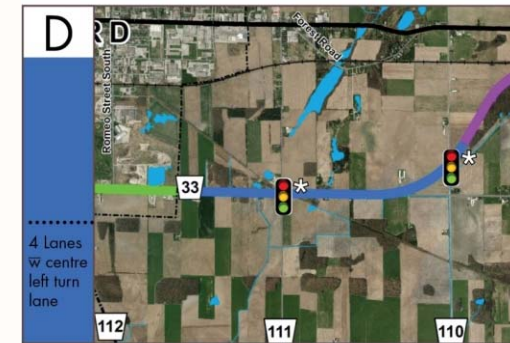
Recommended Plan: Segment D and Segment E



Segments D and E: East Limit of Stratford to East of Road 106

The preferred alternative for Segments D and E consists of:

- 4-lanes with two-way centre left-turn lane for existing alignment section and 7m median for new alignment section
- Signalized intersections at Road 111, Road 110 / Perth Line 33, Road 109 at New Highway 7&8, Road 109 at Existing Highway 7&8 and Road 107
- Grade separation at Road 108
- Stop sign control at Road 106
- Access to Shakespeare via full moves intersection controlled by traffic signals at Road 107, a slip off provision for Highway 7&8 westbound traffic at east limit of village and retention of existing highway access at west limit of village
- Access to east end of Stratford via a Road 109 connection between the south bypass and existing Highway 7&8



The key reasons the south bypass preliminary design alternative is preferred are:

- Better addresses transportation objectives of the study:
 - More direct transportation route (doesn't head north so that it can immediately head south)
 - Better diverts traffic from parallel routes because more traffic originates and is destined for the south
 - Does not draw traffic from/to the south through Shakespeare on Road 107
 - Provides rail grade separations for Roads 109, 108 and 107
- Lower impacts on business area of Shakespeare because better able to attract tourist traffic into the village:
 - Westbound tourist traffic (predominant direction of tourist shoppers) is able to "slip off" the south bypass directly into Shakespeare
 - Eastbound tourist traffic can access the village via existing Highway 7&8 or via the south bypass and Road 107
- Essentially equal overall agricultural impacts as the north bypass:
 - South bypass requires 24 hectares more land, while north bypass displaces 4 more agricultural buildings and impacts 6 more farm property
 - South bypass causes fewer agricultural severances (7 vs 8); furthermore 5 of the south bypass severances involve properties that are already severed by the railway with private crossings that are vulnerable to closure in the event of rail service upgrades
 - Both alternatives potentially land lock the same number of farm parcels (5 parcels) however, the land locked on 2 parcels impacted by the south bypass are forested areas not in use as agricultural field
 - Provides rail grade separations for Roads 109, 108 and 107 that better accommodates movement of farm vehicles and improves safety
 - Does not introduce north Shakespeare ring road that may support extension of Shakespeare urban boundary for development of agricultural lands

The assessment tables detailing the evaluation of Preliminary Design Alternatives are provided in Report J which is available for review on the reference table.

Recommended Plan: Segment F



Segment F: East of Road 106 to West of Regional Road 1

The preferred alternative in Segment F consists of:

- 4-lanes with 5m two-way centre left turn lane
- Stop sign control at Road 104 and Road 102



The key reasons this preliminary design alternative is preferred are:

- Centre left turn lane on Highway 7&8 provides improved operational and safety performance
- Maintains current direct access to and from highway for agricultural businesses and other properties fronting the highway (i.e. no out of way travel)
- Maintains current emergency vehicle access to and from highway
- Recognizes relatively low traffic on crossing roads has minimal impact to Highway 7&8 operations

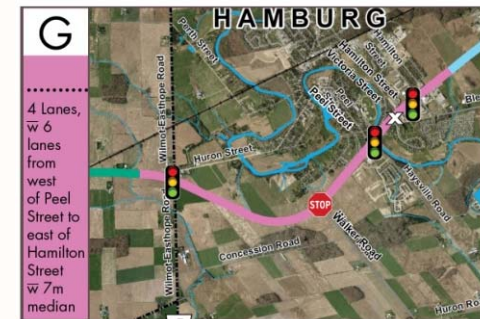
Recommended Plan: Segment G and Segment H



Segment G: West of Regional Road 1 to West of Nafziger Road

The preferred alternative in Segment G consists of:

- 4-lanes with 6-lane segment from west of Peel Street to east of Hamilton Street and a 7m median
- Signalized intersections at Regional Road 1, Peel Street and Hamilton Street
- Stop sign control at Walker Road
- Cul-de-sac at Victoria Street



The key reasons this preliminary design alternative is preferred are:

- 7 m median improves traffic safety
- Intersection configurations minimize footprint impacts to residential, commercial and industrial properties and community facilities
- Avoids need for additional bridge across Nith River

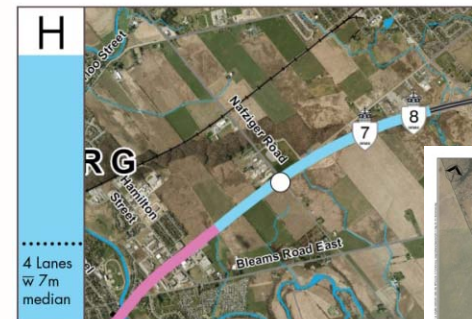
Segment H: West of Nafziger Road to East of Nafziger Road

The preferred alternative in Segment H consists of:

- 4-lanes with a 7 m median
- Interchange at Nafziger Road (see plan to right)

The key reasons this preliminary design alternative is preferred are:

- 7 m median improves traffic safety
- Avoids impacts to recreational complex soccer fields
- Minimizes footprint impacts to patrol yard and industrial properties



Environmental Impact Assessment



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Key potential environmental impacts associated with the Recommended Plan were identified as part of the comparative evaluation of alternatives.

The determination of these impacts was based upon an assessment of existing environmental conditions identified through public input, review of secondary sources and field work undertaken during earlier phases of the study.

Environmental Protection and Mitigation

Preliminary environmental protection and mitigation measures have been developed to address key potential environmental impacts, recognizing the following:

- ❑ The balance between highway inter-regional travel requirements, ongoing access to/from/across the highway, and environmental protection through avoidance was an integral component of project planning and preliminary design;
- ❑ Additional environmental field work will be undertaken during Detail Design to further identify potential environmental impacts;
- ❑ Environmental protection/mitigation will be refined/augmented and incorporated to the extent possible into future Detail Design work; and
- ❑ Environmental protection/mitigation best practices will be implemented during Construction.

Overview of Natural Environment Impacts and Protection / Mitigation Measures



Natural Environment Impacts

- ❑ **Fisheries and Watercourses**
 - New and widened crossings of watercourses
- ❑ **Woodlots and Vegetation**
 - Removal of significant trees
 - Intrusion into edge of large woodlot
- ❑ **Wildlife**
 - Loss of habitat and severance of wildlife movement across highway corridor
- ❑ **Surface and Field Tile Drainage and Stormwater Management**
 - Change in surface drainage to and from right-of-way and severance of field tiles or impairment of outlet
- ❑ **Groundwater and Well Impacts**
 - Removal of wells and potential impairment to water quality and quantity of nearby wells
 - Potential migration of water in stormwater ponds to shallow aquifers



Protection / Mitigation Measures

Fisheries and Aquatic Habitat	Woodlots and Vegetation	Wildlife	Surface and Field Tile Drainage and Stormwater Management	Groundwater and Well Impacts
<ul style="list-style-type: none"> ▪ Avoid/minimize impacts to watercourses and their banks and retain as much riparian vegetation as possible. ▪ Provide natural channel form and substrates, and adequate fish passage. ▪ Plant riparian vegetation upstream and downstream of watercourse crossings. ▪ Develop erosion and sediment control and other measures to prevent entry of deleterious materials to watercourses. 	<ul style="list-style-type: none"> ▪ Protect significant trees and areas of vegetation to the extent possible. ▪ For large woodlot, provide edge management through close cut clearing and landscape planting. ▪ Limit areas in which construction work and associated contractor staging areas are permitted to occur and disturb retained vegetation. 	<ul style="list-style-type: none"> ▪ Schedule/constrain construction activities such as tree clearing/felling, structure removal/repair that may impact bird nesting to occur outside period during which disturbance is not permitted. ▪ Identify significant wildlife crossing areas, and at those areas investigate measures to provide a wildlife crossing during detail design. ▪ Protect retained wildlife habitat areas from construction access and damage. 	<ul style="list-style-type: none"> ▪ Develop design measures to provide for surface drainage across and along the right-of-way. ▪ Develop design measures to provide for positive surface drainage and field tile outlet from adjacent properties, and to protect adjacent properties from highway drainage impacts. 	<ul style="list-style-type: none"> ▪ Address well replacement as part of property negotiation, and monitor nearby wells for water quantity and quality during construction. ▪ Respond to well complaints during construction. ▪ Line stormwater ponds to separate road runoff from aquifers.

Overview of Land Use / Socio-Economic Impacts



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Ongoing Access To/From and Across the Highway

- ❑ Change in local access to/from and across the highway
- ❑ Loss of highway exposure for business areas impacted by changes to highway access
- ❑ Potential conflict between highway capacity operation and safety with adjacent/nearby future land development aspirations

Property Requirements

- ❑ Acquisition of property required for highway construction
- ❑ Associated loss of land area; loss/replacement of buildings; loss/replacement of other infrastructure such as field tile and farm irrigation systems, wells, septic systems etc.; and interference with special considerations such as approved farm nutrient management plans.
- ❑ 204 properties impacted
 - 41 residential properties impacted (22 frontage impacts; 19 properties displaced)
 - 110 agricultural properties impacted (103 frontage impacts; 7 severances resulting in 5 parcels potentially landlocked)
 - 48 commercial properties impacted (41 frontage impacts, 5 properties displaced)
 - 4 community facilities impacted (4 frontage impacts)
 - 1 tourist / hospitality property impacted (1 frontage impact)
- ❑ 31 buildings displaced
 - 20 residential buildings displaced
 - 6 agricultural building displaced
 - 5 commercial building displaced

Highway Noise

- ❑ Highway noise associated with new / widened highway

Waste Management and Property Contamination

- ❑ Property contamination associated with lands acquired for the highway
- ❑ Surplus and waste materials generated from highway construction

Land Use / Socio-Economic Protection / Mitigation Measures



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Ongoing Access To/From and Across the Highway

- ❑ Protect for access to and across the highway in accordance with MTO standards and EA commitments, including crossing road treatments as detailed on the Recommended Plan drawings.
- ❑ For business areas impacted by changes to highway access, develop (in consultation with municipality and local businesses) a highway signing strategy.
- ❑ Develop highway access management plans in consultation with municipalities.

Property Requirements

- ❑ Develop design measures for “restoration” of landscaping and retained entrances that are impacted by the project.
- ❑ Conduct discussions with impacted property owners, and acquire property, with negotiations carried out on a market value basis.

Highway Noise

- ❑ Provide noise barriers at locations as detailed on the Recommended Plan drawings and per EA commitments in accordance with MTO standards.

Waste Management and Property Contamination

- ❑ Undertake remediation of property contamination where it is found.
- ❑ Manage surplus and waste materials according to applicable standards and statutory requirements.

Overview of Agricultural Impacts and Protection / Mitigation Measures



Agricultural Impacts:

- ❑ 100 hectares of agricultural land displaced
- ❑ 110 agricultural properties impacted (103 frontage impacts; 7 properties are split / severed, resulting in 5 parcels potentially landlocked)
- ❑ 6 agricultural building displaced
- ❑ Change in surface drainage to and from right-of-way and severance of field tiles or impairment of their outlet
- ❑ Removal of wells and potential impairment to water quality and quantity of nearby wells
- ❑ Loss of land area; loss/replacement of buildings; loss/replacement of other infrastructure such as field tile and farm irrigation systems, wells, septic systems etc.; and interference with special considerations such as approved farm nutrient management plans.

Protection / Mitigation Measures:

Ongoing Access To/From and Across the Highway

- ❑ Develop highway access management plans in consultation with municipalities

Property Requirements

- ❑ Develop detail design and construction methodology (including staging and access) in compliance with property requirements determined prior to commencement of detail design, and confirm property requirements early in the detail design process.
- ❑ Develop design measures for “restoration” of landscaping and retained entrances that are impacted by the project.
- ❑ Conduct discussions with impacted property owners and acquire property (see Property Acquisition panel).

Surface and Field Tile Drainage and Stormwater Management

- ❑ Develop design measures to provide for surface drainage across and along the right-of-way.
- ❑ Develop design measures to provide for positive surface drainage and field tile outlet from adjacent properties, and to protect adjacent properties from highway drainage impacts.

Groundwater and Well Impacts

- ❑ Address well replacement as part of property negotiation, and monitor nearby wells for water quantity and quality during construction.
- ❑ Respond to well complaints during construction.
- ❑ Line stormwater ponds to separate road runoff from aquifers.

Overview of Cultural Environment Impacts and Protection / Mitigation Measures



Cultural Environment Impacts

- Removal of heritage structures associated with property acquisition
- Potential structural damage to heritage structures in close proximity to highway construction. This is a particular concern with respect to the Fryfogel Inn.
- Potential impact to archaeological resources outside already disturbed highway/road alignments as identified in the Stage 1 Archaeological Assessment.

Protection / Mitigation Measures

Archaeology

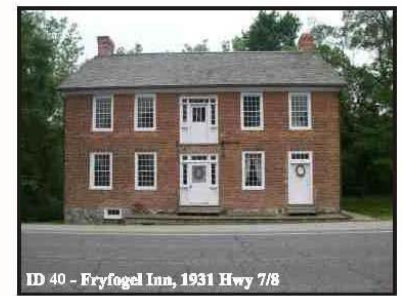
- Undertake Stage 2 archaeological assessment as identified during previous Stage 1 archaeology work; and as may be required on other lands to obtain Ministry of Tourism Culture and Sport clearance.

Built Heritage Resources

- Limit construction access near retained heritage structures.
- Develop construction requirements and constraints with respect to vibration to minimize potential structural damage (e.g. to building foundations).
- Complete preconstruction structure condition surveys (to be subject to consultation with owners).
- Undertake post-construction structure condition survey.

Additional Protection and Mitigation for Fryfogel Inn:

- To avoid footprint impact:
 - Hold current south edge of highway pavement
 - Utilize urban cross-section on both sides of highway
 - Hold current highway vertical elevation
- To address foundation concerns:
 - Commitment to undertake pre-construction survey during detail design and post-construction survey and to work with Historical Society to repair damage to foundation if survey shows it is caused by highway construction.
 - If the pre-construction survey shows the foundation is in poor condition making it vulnerable to construction-related damage, the Ministry will work with the Historical Society to try and secure grants for the foundation rehabilitation.



Stormwater Management Strategy



A stormwater management (SWM) strategy has been developed for the corridor to address water quality and quantity and erosion control requirements. The SWM strategy takes into consideration the ultimate conditions for the Highway 7&8 corridor (i.e. 2031 lane requirements) as well as groundwater levels and drainage conditions of adjacent lands in the study area.

The stormwater management strategy for Highway 7&8 has been determined and is presented on the Preliminary Design Plans on the tables. Generally, the strategy involves:

- ❑ Flat bottom swales along a majority of the highway right-of-way
- ❑ Storm sewer systems for the urbanized sections in Stratford and New Hamburg
- ❑ Stormwater management facility in the vicinity of the Nith River
- ❑ A commitment to develop positive outlet drainage conditions for surface drainage and field tiled systems on adjacent properties during detail design
 - Positive outlet to highway drainage system where land and tile drainage are higher than the invert of the drainage swale within the highway right-of-way; and
 - Commitment to investigate alternative drainage treatment for land and tile drainage that is lower than the invert of the drainage swale within the highway right-of-way.

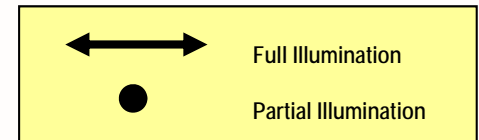
Roadway Lighting



The purpose of roadway lighting is to improve traffic safety and operations during hours of darkness. Lighting improves safety by aiding drivers at night in navigating the roadway and identifying vehicles, cyclists, pedestrians and roadway features.

The illumination requirements for the recommended plan are as follows:

- ❑ Continuous illumination will be provided for the following mainline segments:
 - Lorne Avenue and Erie Street within the City of Stratford
 - Highway 7&8 from Peel Street to Hamilton Street
- ❑ Illumination will be provided at the following intersections:
 - All intersections with traffic signals
 - Both roundabout intersections
 - Nafziger Road Interchange ramp terminal intersections



Property Acquisition



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- If you own property that is impacted by the Recommended Plan please:
 - Make sure you are on our mailing list before you leave the PIC
 - Discuss the potential impacts and what the MTO's process is for purchasing property with a member of the study team
 - Pick up a Property Information handout
- Individual property requirements will be confirmed through the completion of the Preliminary Design Phase and documented in the Transportation Environmental Study Report which will be filed at the completion of the study.
- Discussions to purchase property are typically initiated with impacted property owners during detail design when construction is programmed.
- Compensation is based on the market value of your property, or in the case of a partial acquisition, the loss of market value and issues of "injurious affection". Compensation addresses loss of land area; loss/replacement of buildings; loss/replacement of other infrastructure such as field tile and farm irrigation systems, wells, septic systems, etc.; and interference with special considerations such as approved farm nutrient management plans.
- Market value is determined by a property appraiser that will provide an independent opinion of value based on market evidence.

Highway Access Management



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The purpose of highway access management is to protect the integrity of the highway corridor and the movement of people and goods, and the safety and capacity of the provincial highway and associated intersections and interchanges by:

- Optimizing travel time by reducing conflicts at access connections to the highway;
- protecting the safety and capacity of local traffic on municipal roads in the vicinity of their connection to the provincial highway network;
- assisting municipalities in developing and achieving municipal land use planning objectives.

The key principles of highway access management to achieve the above are:

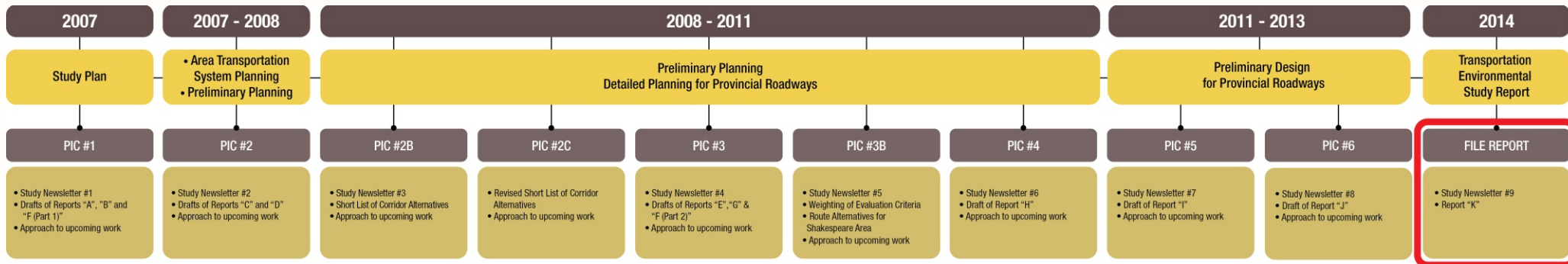
1. Maximize new or increased local access via new or improved municipal roads and intersections.
2. Where new or increased local access to the provincial highway can't be avoided, strive to provide spacing of road and private access connections that meets "desirable" standards, and ensure that such spacing meets "minimum" standards.
3. For land development proposals that have the potential to impact the provincial highway and/or intersecting/adjacent municipal roads, a Traffic Impact Study is typically required.
4. It is in the interest of municipalities, property owners and developers to undertake the early stages of their planning with the intent of complying with the foregoing access management principles.
5. All existing commercial and other private access connections to the existing and proposed provincial highway which were legally in existence prior to the date of its designation are allowed to remain for their present land use, unless major changes to those entrances are being proposed.

MTO will work with the municipalities to develop highway access management plans. These will act as "master plans" to coordinate highway access management and adjacent road/land development on a strategic rather than reactive basis.

Next Steps



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Following this PIC, the Study Team will:

- Review and respond to comments received through the PIC #6 consultation process.
- Finalize the Preliminary Design for the Recommended Plan taking into consideration the input received.
- Prepare the Transportation Environmental Study Report (TESR) for filing and public review in 2014.
 - The TESR will document the study process, the recommended plan including environmental protection measures and commitments for future action with regard to implementation of the project.

Notices will be mailed to contacts on the Study mailing list and published in local newspapers to explain the review process and identify the locations where the TESR will be available for the 60-day public review period.

After the TESR review period, key steps for project implementation will include:

- Environmental Clearance
- Right-of-Way Designation (subject to environmental clearance)
- Detail Design / Construction when Programmed (subject to environmental clearance; timeline not yet defined)

Implementation



Highway 7&8 from Stratford to New Hamburg is listed in the Southern Highways Program 2012 to 2016 under “Planning for the Future.” The “Planning for the Future” list includes projects that are not part of the current five-year construction plan. They are subject to further study and prioritization for possible future construction. At the present time, there is no timeline or funding for the implementation of the project.

When environmental clearance is obtained, MTO will consider prioritizing the study recommendations against other highway expansion needs throughout the province and programming the Highway 7&8 Study recommendations. The actual construction timing will be subject to the availability of funding as the forecasted needs over the 20-year planning horizon become realized. There is seldom a single “consideration” for implementation of highway improvements. It will be dependent on a number of considerations as follows:

- ❑ Facility Capacity Consideration: Segments of the recommended plan may be required when congested conditions regularly occur during peak periods (i.e. when the quality of effective operations breaks down during periods of heavy use).
- ❑ Facility Safety Consideration: Segments of the recommended plan may be required if the reported collision / accident rate becomes higher than the provincial average rate.
- ❑ Municipal Development Consideration: Municipal partnerships may be required for implementation of segments of the recommended plan to accommodate municipal development, such as widening of Lorne Avenue in Stratford, or provision of the Nafziger Road interchange in New Hamburg.
- ❑ Interim Local Improvements Consideration: In addition to the foregoing, interim local improvements to the existing highway may be required to address the condition of items such as the pavement, ditches and culverts / bridges until the recommended plan is implemented.

Get Involved ... Be Involved ... Stay Involved ...



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Thank you for participating in tonight's PIC.

Your comments are important to us. The following options are available:

- Place your Comment Sheet in the box provided tonight or submit to the Study Team by **October 31, 2013**.
- Mail a letter to the Study Team
 - Highway 7&8 Corridor Study: c/o AECOM, 300 Water Street, Whitby, ON L1N 9J2
- Phone the Study Team toll free at 1(866)-921-9268
- Send a fax (905)-668-0221
- E-mail the Study Team through the Website at www.7and8corridorstudy.ca

All comments are requested by

October 31, 2013