Bay Bridge Road CP Rail Overpass replacement project

Public Information Centre
April 25, 2013

DISPLAY BOARDS/EXHIBITS
HANDOUT PACKAGE
Bay Bridge Road CP Rail Overpass replacement project
Public Information Centre

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Schedule
Welcome to the Public Information Centre (PIC) meeting for the Bay Bridge Road CP Rail Overpass replacement project.

Please record your attendance and obtain a comment sheet at the registration desk.

As a requirement of the Municipal Class EA process, the City is initiating an addendum to the previously completed (February 2012) Environmental Study Report (ESR), due to changes from the initial ESR. The addendum project will evaluate alternatives and develop a plan for widening Dundas Street West, to provide a left turn lane, as an extension of the works included in the Bay Bridge Road CPR ESR.

There is an opportunity at any time during the EA process for interested persons to provide comments on the addendum modifications. Any comments received will be collected under the Environmental Assessment Act and, with the exception of personal information, will become part of the public record.

Should you have any questions regarding the presentation materials, or any other aspect of the study, please speak to any of the City or Consultant study team members in attendance. We encourage your input/feedback on the material being presented on the display boards. Please deposit completed forms in the comment box or mail/ fax/ e-mail to the address at the bottom of the form.
Introduction

In 2012 the City of Belleville completed a Municipal Class Environmental Assessment to evaluate alternatives for the rehabilitation and or replacement of the Bay Bridge Road CPR Overhead, located on Bay Bridge Road, just south of Dundas Street West. The Environmental Study Report identified the recommendation for replacement with a single span structure constructed on a new alignment just east of the existing structure. The new structure includes provision for a 3.0 metre dedicated multi-use walkway.

The City is now initiating an addendum to the previously completed Environmental Study Report (ESR) for the Bay Bridge Road CP Rail Overpass replacement project. Because it is anticipated that there will be changes from the original ESR, to plan for complementary elements of the Dundas Street West/Bay Bridge Road intersection, and roadway plan on Dundas Street West (Coleman Street to Bay Bridge Road), an ESR Addendum is required.

The addendum will evaluate alternatives and develop a plan for widening Dundas Street West, to provide a left turn lane, as an extension of the works included in the Bay Bridge Road CPR ESR Report completed in February 2012. The project will provide solutions that complement the current Bay Bridge Road improvements. The ESR addendum will document the effects anticipated within the extended Study Area and the corresponding mitigation measures proposed. The addendum will amalgamate the proposed reconstruction of Dundas Street West – Coleman Street to Bay Bridge Road with the subject ESR. The two roadways (Bay Bridge Road CPR Overhead and Dundas Street West) are immediately adjacent to one another and are inter-related, allowing an addendum to incorporate the design of both roadways. The EA Addendum will examine alternatives and potential impacts; present the improvement alternatives, analysis and evaluation of alternatives, and the technically preferred alternative; and recommend mitigation measures.
Environmental Assessment (EA) Process

This project is being undertaken as an addendum to a Schedule “C”, Class EA in accordance with the Municipal Class Environmental Assessment, 2011, which is available at the Resource Table.

This Schedule “C” Municipal Class EA will culminate in the delivery of an addendum to the original Environmental Study Report.

There is an opportunity at any time during the environmental assessment process for interested persons to provide comments and review outstanding issues. If after participating in this project, and at the conclusion of the addendum review process, you still have concerns with any changes to the previous ESR, you have the right to request the Minister of the Environment to reclassify the project as a Part II order (or bump-up) to an Individual Environmental Assessment.
Addendum Works

The elements of work that are being planned to expand the previously defined ESR project include:

• Dundas Street West/Bay Bridge Road Intersection modifications to improve traffic operations (dual westbound left turn lanes and dedicated eastbound right turn lane)
• Bay Bridge Road northbound dual left turn lanes
• Old Bay Bridge Road modifications (access to Travelodge Hotel) to accommodate Bay Bridge Road widening
• Landscaping concepts (Bay Bridge Road/Dundas Street West Intersection)
• Dundas Street West improvements (Bay Bridge Road to Coleman Avenue)

These elements of works, alternatives and Technically Preferred Alternatives are presented on the following exhibits.
Study Area Transportation Characteristics

- Bay Bridge Rd. and Dundas St. West are arterial roadways. Arterial roads are designed to move large volumes of traffic at higher rates of speed.
- Bay Bridge Rd. and Dundas St. West are providing provincial highway connectivity through Belleville (i.e. part of Highway 62).
- Both roads accommodate commuters, tourists, recreational users and heavy vehicles.
- Bay Bridge Road is the only crossing of the Bay of Quinte in the greater Belleville area.
- Sidewalks are provided on both sides of Bay Bridge Rd. and Dundas St. West
- No dedicated bicycle lanes on either roadway.
- No dedicated left turn access to commercial properties on Dundas Street West

Typical, 2010 daily traffic volumes:
- Dundas St. West (East of Bay Bridge Rd.) = 25,000 vehicles/day.
- Bay Bridge Rd. (South of Dundas St. West) = 17,500 vehicles/day.
### Assessment of Bay Bridge Road/Dundas Street West Intersection Alternatives

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Description/Issues</th>
<th>Recommended Improvement</th>
</tr>
</thead>
</table>
| **Road Performance**  | • Westbound left turn (WBLT) and northbound left turn (NBLT) movements at Bay Bridge Rd./Dundas St. West intersection experience heavy volumes in peak hours | • Delays to these critical movements are increasing and intersection performance (Level of Service) is decreasing  
• Demands are expected to increase  
• Both movements warrant dual left turn lanes based on Transportation Association of Canada (TAC) guidelines |
|                       | • Delays to these critical movements are increasing and intersection performance (Level of Service) is decreasing  
• Demands are expected to increase | • Both movements warrant dual left turn lanes based on Transportation Association of Canada (TAC) guidelines |
| **Roadway Safety**    | • Eastbound right turn movement also experience heavy demands in peak hours             | • Right turning vehicles are delayed by through vehicles (during a red indication)  
• This movement warrants a dedicated right turn lane based on TAC guidelines |
|                       | • There are no dedicated turn lanes on Dundas St. West between Bay Bridge Rd. and Mary St. (Old Bay Bridge Road)  
• There are numerous commercial/retail establishments (i.e. north side) | • Left turn movements are shared with the through movement (in the centre lane)  
• Provide a dedicated centre turn lane to address local access needs  
• Can also be used by EMS to bypass congestion on roadway  
• TAC indicates that certain collisions (e.g. rear end) may be reduced by 50% or more |
| **Pedestrians and Cyclists** | • There are two residential driveways within the Bay Bridge Rd./Dundas St. W. intersection  
• There are no dedicated cycling facilities on Bay Bridge Rd. or Dundas St. W. | • Safety concerns related to access/egress to driveways within a heavily used intersection  
• Removal of driveways within intersection  
• A 3.0 m multi-use pathway will be provided on the south side of Dundas St. West, east of Bay Bridge Rd.  
• The pathway will be shared among all users |
| **Pedestrians and Cyclists** | • Cyclists share travel lanes with automobiles and trucks on Dundas St. West or use the adjacent sidewalks | • A 3.0 m multi-use pathway will be provided on the south side of Dundas St. West, east of Bay Bridge Rd.  
• The pathway will be shared among all users |
Bay Bridge Road/Dundas Street West Intersection Alternatives

Alternative A: Single Left Turn (LT) Lane
  - Traffic delays (Level of Service E)
  - Realignment at the intersection requires a review of the impact on existing residential properties

Alternative B: Double LT Lanes and Dedicated Eastbound Right Turn Lane
  - Improves roadway operations
  - Improves roadway safety
  - Realignment at the intersection requires a review of the impact on existing residential properties

Study Recommendations:
The intersection design will reflect a new bridge service life of 75 years. The Alternative B intersection design recommendation will accommodate long term traffic demand with the inclusion of double left turn lanes to provide an acceptable level of service, and a dedicated eastbound right turn lane.
Old Bay Bridge Road Relocation

OLD BAY BRIDGE ROAD
RELOCATE OLD BAY BRIDGE ROAD WITH ARMOUR STONE OR GABION WALL
Bay Bridge/Dundas Street West
Cross Section Alternatives

• Do Nothing: Maintain 4-lane cross section
• Alternative A: Rehabilitate the existing street using the existing 4-lane cross section and replacement of the south sidewalk with a 3 m multi-use path
• Alternative B: Left turn lane with widening about the centreline, 3 m multi-use path south side
• Alternative C: Left turn lane with widening to the south (maintaining north right-of-way (ROW) limit), 3 m multi-use path south side
• Alternative D: Left turn lane with widening to the north (maintaining south ROW limit), 3 m multi-use path south side
# Evaluation of Alternative Designs

**Legend:** Relative comparison
- **Good (no impacts)**
- **Poor (impacts)**
- **Fair (equal)**
- **Fail**

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>DO NOTHING</th>
<th>ALTERNATIVE A (No Turn Lane)</th>
<th>ALTERNATIVE B (Centre Widening)</th>
<th>ALTERNATIVE C (South Widening)</th>
<th>ALTERNATIVE D (North Widening)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRANSPORTATION ENGINEERING</strong></td>
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<td>Accommodates Traffic Demands</td>
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<td>✗</td>
<td>✗ eastbound</td>
<td>✗ eastbound</td>
<td>✗ eastbound</td>
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<tr>
<td>Accommodates people/cyclists</td>
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<td>✗ multi-use path</td>
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<td>✓</td>
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<tr>
<td>Business Impacts</td>
<td>✓</td>
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<td>O Parking loss (13 spaces)</td>
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<td>Noise Impacts</td>
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<td><strong>NATURAL ENVIRONMENT</strong></td>
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<td>Vegetation Impact</td>
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<td>Impacts to Existing Vegetation</td>
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<td>Impacts Wildlife</td>
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<td>Impacts to Fish and Aquatic Habitat</td>
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<td>Surface Water Quality and Quantity</td>
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<td><strong>COST</strong></td>
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<tr>
<td>Capital</td>
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<td>✓ lowest cost</td>
<td>- 2nd lowest cost</td>
<td>- 3rd lowest cost</td>
<td>✗ highest cost</td>
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<tr>
<td>Utility Relocation</td>
<td></td>
<td>-</td>
<td>✓ lowest</td>
<td>-</td>
<td>✗ highest costs</td>
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<tr>
<td>Property Acquisition</td>
<td>✓</td>
<td>✓</td>
<td>- CP Rail (Minor)</td>
<td>✗ CP rail (Major)</td>
<td>O businesses</td>
</tr>
</tbody>
</table>
## Recommended Design

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>DO NOTHING</th>
<th>ALTERNATIVE A</th>
<th>ALTERNATIVE B</th>
<th>ALTERNATIVE C</th>
<th>ALTERNATIVE D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUMMARY</strong></td>
<td>The DO NOTHING approach was carried forward for comparative purposes only. Despite being the preferred option from a cost perspective, it does not meet the objectives.</td>
<td>Meets most of the objectives. Transportation objectives are not achieved however the pedestrian objectives are achieved with very little or no property requirements. Property acquisition from the CP rail corridor with no impact to the current operation of the corridor. Least costly alternative with regards to utility relocations.</td>
<td><strong>Technically Preferred</strong> Meets objectives - transportation and pedestrian objectives achieved with little or no property requirements. Minor property acquisition from CP rail corridor with no impact to the current operation of the corridor. Second least costly alternative.</td>
<td>Meets objectives since transportation and pedestrian objectives somewhat achieved. Fails with regards to not providing separation from the roadway and the multi-use path. Significant property acquisition with significant impacts to existing businesses. Mary Street approach to the CP rail crossing unchanged.</td>
<td>Meets objectives since transportation and pedestrian objectives are achieved. For the most part provides for separation from the roadway and the multi-use path. Significant utility relocation costs. Significant property acquisition with significant impacts to existing businesses. Mary Street/Old Bay Bridge Rd approach is significantly changed potentially triggering regulatory requirements.</td>
</tr>
</tbody>
</table>

Despite being the preferred option from a cost perspective, it does not meet the objectives.
Dundas Street Cross Section Alternatives

- Alternative A: Modified Do Nothing (replace south sidewalk with path)
- Alternative B: Widen on Centre
- Alternative C: Widen to the South
- Alternative D: Widen to the North

Preferred Alternative
Dundas Street Cross Section Alternatives

Dundas Street West South widening unable to maintain Mary Street/Old Bay Bridge Road access due to steep grade at rail crossing.
Dundas Street Cross Section Alternatives

SECTION 2 - DUNDAS STREET WEST
ALTERNATIVE D - WIDEN TO THE NORTH

Legend:
- Existing Right-of-Way
- Property Required
- Property Required
- Not to Scale Forward
- Not to Scale Forward

SECTION A--A

Legend:
- Existing Right-of-Way
- Property Required
- Recommendation
- Recommendation
- Not to Scale Forward
Dundas Street West Technically Preferred Alternative

Legend:
- Existing Right-of-Way
- Property Required
- Recommendation
  - To Carry Forward
  - Not To Carry Forward
Schedule

Following this Public Information Centre meeting we will:

- Review all Comments
- Finalize the Technically Preferred Alternatives
- File the Environmental Study Report (ESR) Addendum – Spring 2013
- Study Completion – Summer 2013

Future Activities

- Detail Design of the Recommended Plan
- Project Implementation

How Can You Remain Involved in the Study?

You can remain involved in the Bay Bridge Road CP Rail Overpass Municipal Class Environmental Assessment (EA) Addendum study by:

- Requesting that your name/e-mail be added to our study mailing list
- Providing a written comment sheet
- Contacting the City or consultant at any time during the study

Any of our representatives can assist you with the above activities.

Thank you for your participation at tonight’s meeting. Your input into this study is valuable and appreciated. Comment forms are available at the Registration Desk. All information is collected in accordance with the Freedom of Information and Privacy Act.

Please provide your completed comment form on or before **May 9, 2013**.