WHARNCLIFFE ROAD SOUTH ENVIRONMENTAL ASSESSMENT STUDY
Becher Street to Commissioners Road

November 2016
Accessibility

Under the Accessibility Standards for Customer Service Regulation (2008), the City of London (City) is committed to ensuring that public participation opportunities are accessible to all participants.

This Public Information Centre (PIC) incorporates the following accessibility features:

- Accessible venue location for persons with disabilities, including wheelchair ramps, accessible washrooms and parking
- For persons requiring assistance, the Project Team will:
  - Explain presentation board content
  - Assist with the preparation and submission of comment forms
Purpose of Public Information Centre 2

• Provide an update on the EA Study
• Provide a summary of PIC 1
• Present the Preliminary Preferred Design which includes:
  • The CN Rail Bridge replacement and the recommended improvements between Horton Street and Becher Street
  • The longer-term recommended improvements on Wharncliffe Road, south of Horton Street
• Review the potential benefits, impacts and mitigation recommendations
• Answer questions and gather feedback
• Identify next steps

Please ask questions and make your opinions known to the Project Team. Fill out a comment sheet here or on-line.
The Municipal Class EA process enables the planning and implementation of municipal infrastructure projects taking into account the environmental setting, agency and local community interests and unique project requirements.

Study Process and Schedule

Phase 1: Problem and Opportunity
- Identify and describe Problems and Opportunities

Phase 2: Alternative Planning Solutions
- Identify planning solutions
- Document existing conditions
- Alternative Approaches / Solutions

Phase 3: Alternative Design Concepts
- Develop design concept alternatives
- Detailed inventories of social, cultural, economic environments
- Evaluate design alternatives and select a Preliminary Preferred Design

Phase 4: Environmental Study Report
- Present recommendations to LACH and CWC
- Complete the Environmental Study Report (ESR)
- Place ESR on Public Record

Phase 5: Implementation (Long-Term)
- Proceed to detail design of the project
- Property acquisition and utility relocation
- Initiate construction

Study Commencement
February 2015

PIC #1 June 16, 2015
- Problems and Opportunities
- Alternative Approaches (Planning Solutions)
- Concepts illustrating improvement opportunities for CN Rail Bridge and road cross-sections

PIC #2 November 30, 2016
- Preliminary Preferred Design for the CN Rail Bridge Replacement and other longer-term improvements
- Urban Design Concept for the Preliminary Preferred Design

Study Completion
Spring 2017
Policy and Planning Context

**City of London 2030 Transportation Master Plan (TMP)**

- Phase 1: Becher Street to Springbank Drive - Replace the CN Rail Bridge and provide for one additional northbound lane on Wharncliffe Road between Horton Street and Becher Street
- Phase 2: Springbank Drive to Commissioners Road - ‘Optimize’ the function of the street for vehicles and pedestrians between Horton Street and Commissioners Road (no widening)

**The London Plan**

- Wharncliffe Road South is a Civic Boulevard with an emphasis on pedestrian, cycle and transit movements, medium volume of traffic, higher quality pedestrian environment and higher standard of urban design

**LondON Bikes**

- LondON Bike does not propose cycling facilities on Wharncliffe Road South
- Existing signed bike routes on Byron Avenue, Elmwood Avenue, and Emery Street

**Wharncliffe Road Reconstruction Elmwood Place to Baseline Road West Corridor Visioning Brief (2010)**

- Refine the requirements for the corridor’s long term vision
- Identify and confirm property requirements
- Prioritize desired corridor improvements (short term vs. longer term)
Existing Conditions

No existing northbound or southbound left turn from Wharncliffe Road to Horton Street.

Inductive turning restriction at Stanley Street.

2030 TMP proposes one additional northbound lane between Horton Street and Becher Street.

Cut through traffic on side streets during peak hours.

Constrained Right-of-Way limits widening alternatives to improve capacity.

The Smart Moves 2030 Transportation Master Plan recommends optimization / Threat Priority Improvements.

Cross proximity of adjacent intersections.

Wharncliffe Village - Old South Heritage Conservation District

Residential Character

Commercial Character

EXISTING CONDITIONS
Below is a summary of the comments collected at PIC 1, and how these have been addressed in the study:

- Keeping traffic moving efficiently on Wharncliffe Road and at intersections should reduce traffic congestion that leads to idling and higher emissions loading.
- The project team has made every effort to minimize property impacts during a thorough review of alternatives.
- Comments related to transit service on Wharncliffe Road have been shared with London Transit Commission.
- Rapid transit is being planned for Richmond Street as part of SHIFT. Wharncliffe Road will be a supporting part of the overall road and transit network.
- One northbound through-lane will be provided to 'close the gap' between Horton Street and Becher Street.
- Northbound and southbound left-turn lanes will be provided at Horton Street.
- Other improvements at the Horton Street intersection (dedicated turn-lanes, increased storage length on turn lanes etc.) are proposed.
- Road widening will attract more traffic, resulting in noise, air quality and property impacts.
- Traffic congestion leads to cut-through and infiltration into residential streets.
- Impacts to heritage properties and historic neighbourhoods.
- Why should the neighbourhood be impacted by providing for traffic from suburbs.
- The Project Team has considered all reasonable alternatives to avoid impacts to heritage properties. Impacts and mitigation is being considered in accordance with City and Provincial heritage policies.
- The 2030 Transportation Master Plan recognizes Wharncliffe Road as an arterial road and plays an important role in supporting north-south traffic.
- The improvements on Wharncliffe Road are intended to benefit local mobility as well as access into the downtown for all traffic.
- Adding one northbound through lane on Wharncliffe will remove the bottleneck and improve traffic flow.
- Adding left turn lanes at Horton Street will shift traffic flow from Stanley Street and Springbank Drive. Other intersection works should also optimize traffic operation. Signage may be used to manage cut-through traffic during peak hours.
Summary of Problem / Opportunities and Recommended Planning Solution

Problems

- CN Rail Bridge creates a bottleneck for northbound traffic
- Limited turning movements at the Horton Street Intersection
- Narrow travel lanes, sidewalks and boulevards
- High number entrances/ driveways
- High collision rates at and between major intersections
- Long traffic delays at intersections
- Cut-through traffic on residential streets

Opportunities

- A wider CN Rail Bridge to accommodate one additional northbound lane on Wharncliffe Road
- Addition of southbound and northbound left-turn lanes at Horton Street
- Addition of turn lanes and other improvements at other intersections
- Review accesses and driveways in an effort to reduce the number of potential conflict points
- Protect for a future long-term ideal street right-of-way through the strategic acquisition and dedication of property, as opportunities arise

The Recommended Planning Solution includes:

**Phase 1 – Becher Street to Springbank Drive**
- CN Rail Bridge replacement
- Add one northbound lane to Wharncliffe Road, north of Horton Street
- Improvements to Horton Street and Wharncliffe Road intersection

**Phase 2 – Springbank Drive to Commissioners Road**
- Partial Road Cross-Section Improvements
- Intersection improvements
- Access Management
A phased approach to improvements is recommended. This recognizes that the CN Rail Bridge replacement is high priority and provides the City with flexibility to implement longer-term improvements as needed.

**Phase 1**
- CN Rail Bridge improvements
- Horton Street improvements

Implementation of Phase 1 is planned immediately following this Environmental Assessment (EA) Study.

**Phase 2**
- Cross-section improvements
- Intersection improvements
- Access Management

Improvements to the corridor operation and traffic flow gained from Phase 1 will be monitored to inform the implementation schedule for Phase 2.
PHASE 1

- CN Rail Bridge Replacement
- Horton Street Intersection Improvements
CN Rail Bridge

- Constructed in 1924
- 3-span steel girder structure, with 2 rail tracks
- Currently has 2 southbound and 1 northbound lane
- Centre span of ~11.6 m
- Vertical clearance of 4.2 m (minimum clearance under the current design guidelines is 5.0 m)
- Elevated sidewalks on both sides

CN Rail Bridge Replacement Alternatives considered during this study were developed based on two basic construction techniques:

1. **In-Place Construction** – constructs new bridge adjacent to existing bridge, and over a four day period, replaces the old bridge with the new one

2. **Rail Diversion** – diverts rail traffic onto new temporary tracks, in order to work on existing bridge and maintain rail traffic
Staging Process

1) Coordinate existing municipal services projects with Wharncliffe Road construction
2) Construct temporary trestles
3) Lower Horton Street and Wharncliffe Road
4) Construct abutments for new bridge
5) Construct new bridge north of existing bridge on temporary abutments
6) Remove existing bridge and jack new bridge in place (full closure over long weekend)

- Duration of bridge construction (stages 2 to 6 above) would be approximately 15 months.
- Opportunity to maintain traffic on Wharncliffe Road for longer period of time.
- Estimated cost for In-Place Construction and CN Rail Bridge (stages 2 to 6 above) is $15.6M.
CN Rail Bridge Replacement Alternatives

Staging Process

1) Coordinate existing municipal services projects with Wharncliffe Road construction
2) Construct temporary retaining walls, bridge, and diversion tracks (~1 km)
3) Lower Horton Street
4) Build new bridge
5) Remove existing bridge and build new abutments
6) Lower Wharncliffe Road
7) Install new bridge
8) Restore rail traffic to original line and remove temporary bridge, retaining wall, and diversion

- Duration of bridge (stages 2 to 8 above) construction would be approximately 22 months.
- Anticipated periodic road closures associate with construction.
- Estimated cost of Rail Diversion and CN Rail Bridge (stages 2 to 8 above) is $18.5M.
Wharncliffe Road South
Environmental Assessment Study

CN Rail Bridge Replacement Preliminary Staging Plan

Typical Trestle Construction

Typical Crane Positioning
## CN Rail Bridge Replacement Assessment

<table>
<thead>
<tr>
<th></th>
<th>In-Place</th>
<th>Diversion</th>
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<tbody>
<tr>
<td><strong>Alignment Options</strong></td>
<td>• Can only maintain existing alignment</td>
<td>• Flexible for maintaining existing alignment or shifting to west</td>
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<tr>
<td><strong>Property Impacts</strong></td>
<td>• Five (5) full and six (6) partial (edge, land only) property requirements</td>
<td>• Six (6) full and four (4) partial property requirements</td>
</tr>
<tr>
<td><strong>Staging Impacts</strong></td>
<td>• Construction equipment required on properties just north of the rail tracks, east and west of Wharncliffe Road</td>
<td>• Construction equipment required on properties just north of the rail tracks, east and west of Wharncliffe Road</td>
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<td><strong>Temporary infrastructure</strong></td>
<td>• Temporary trestles and abutments for new bridge during construction</td>
<td>• Temporary 1 km diversion, retaining wall, and bridge during construction</td>
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<td><strong>Transportation Impacts</strong></td>
<td>✓ Opportunity to maintain traffic on Wharncliffe Road for longer periods of time.</td>
<td>✕ Longer anticipated road closures associated with construction.</td>
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<td><strong>Cost</strong></td>
<td>✓ $15.6 M (only includes bridge and rail construction costs)</td>
<td>✕ $18.5 M (only includes bridge and rail construction costs)</td>
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</table>
The preferred CN Rail Bridge Replacement Alternative is the **In-Place Construction** because it:

- Does not require building a 1 km temporary rail detour, temporary bridge and retaining wall, thus has a smaller impact footprint
- Has more flexibility in the construction staging
- Reduced construction duration
- Has opportunity to maintain more open traffic lanes on Horton Street during construction
- More cost effective as does not require building temporary infrastructure required for diversion
- Similar property impacts for both alternatives when considering construction staging
- Train traffic is maintained on the existing tracks with short-term rail disruption
- CN Rail has provided input and an endorsement to the In-Place construction design
Intersection Improvements – Horton Street

1. New left-turn lane
2. New right-turn lane
3. Extending left-turn lane
4. New through/right-turn lane
5. New left-turn lane
6. New through lane
7. Dedicated right-turn
8. Modify noise wall and retaining wall
9. Extend left-turn lane
10. New through/right-turn lane
11. Lowering and access restriction to Stanley Street
A Cultural Heritage Assessment Report has been completed to determine which properties may require further review during detail design and the completion of a Cultural Heritage Evaluation Report, Heritage Impact Statement, or Cultural Heritage Documentation Report.

The Project Team will be meeting with the London Advisory Committee on Heritage (LACH) regarding the recommended design.

The project involves five (5) full and eight (8) partial (edge, land only) property requirements.

There are anticipated impacts to the following heritage properties:

- There will be substantial impact to the property located at 100 Stanley Street, which is municipally designated under Part IV of the Ontario Heritage Act. A portion of the property is required for the widened Wharncliffe Road South and retaining wall and the remainder is required for large construction equipment (e.g. cranes, drill rigs etc.) to construct the CNR grade separation. A Heritage Impact Statement (HIS) will be required.

- 32 Wharncliffe Road South is listed on the City of London’s Inventory of Heritage Resources (the Register) as Priority 3 resource and has partial (land only) impacts.
## Phase 1 Implementation

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<tr>
<td>Review and respond to all public and agency comments</td>
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<td>Prepare the Environmental Study Report (ESR)</td>
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<td>Present the ESR to Civic Works Committee and Council</td>
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<tr>
<td>File the ESR for public review (30-day review period)</td>
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<tr>
<td>Detail design for the CN Rail bridge replacement and Horton Street Improvements including additional review of heritage features, impacts and mitigations</td>
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<tr>
<td>Property acquisitions and coordination with other infrastructure projects</td>
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<tr>
<td>Construction of Phase 1 following the Staging Process and other infrastructure projects</td>
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*Schedule pending coordination of other municipal servicing projects, and obtaining all required permits and approvals*
PHASE 2

- Cross-section improvements
- Intersection improvements
- Access Management
Partial Road Cross-Section Improvements

Elmwood Avenue to Emery Street

- Increase sidewalk width to 1.8 m (City Standard)

- Increase boulevard widths to 1 m and 1.5 m to improve the pedestrian environment and better accommodate hydro poles

- Reduce lane widths to 3.3 m to create continuity between corridor sections

- Opportunity to provide additional boulevard width on the west side during property redevelopment to provide space for additional streetscaping treatments
Springbank Drive to Elmwood Avenue, and Emery Street to Base Line Road

- Increase the lane widths to 3.3 m and 3.5 m to improve safety and create continuity

- Increase sidewalk width to 1.8 m (City Standard)

- Increase the boulevard widths to 1 m and 1.5 m to improve pedestrian environment and better accommodate hydro poles

- Opportunity to provide additional boulevard width on the west side during property redevelopment to provide space for additional streetscaping treatments
Road Design Alternatives

- Based on the partial road cross-section improvements, additional road right-of-way (ROW) is required.
- 3 design alternatives were reviewed:
  - Widen to the east
  - Widen to the west
  - Widen on existing alignment
- Overall impacts to residential and commercial properties were assessed for each alternative.
- The majority of residential properties are located on the east side, and there is generally more available right-of-way on the west side from recently developed properties.
- **Based on the assessment, it is recommended to widen the roadway to the west, which has the lowest overall impacts.**

See Preliminary Preferred Plans available on the tables.
Intersection Improvements – Commissioners Road

Additional Intersection Improvements Include:

**Emery Street** – Recommended addition of north and southbound dedicated left-turn lanes

**Base Line Road** – Recommended extension of southbound left-turn lane
Cultural Heritage for Phase 2

- A Cultural Heritage Assessment Report has been completed to determine which properties may require further review during detail design and the completion of a Cultural Heritage Evaluation Report, Heritage Impact Statement, or Cultural Heritage Documentation Report.

- The Project Team will be meeting with the London Advisory Committee on Heritage (LACH) regarding the recommended design.

- There are anticipated impacts to the following heritage properties:
  - One (1) property, 189 Wharncliffe Road South, included on the City of London’s Inventory of Heritage Resources (the Register) as a Priority 2 resource, will be fully impacted. An evaluation of the property’s potential cultural heritage value or interest will be required prior to consideration of its removal.
  - Six (6) heritage listed properties will be partially impacted with acquisition of land only through strip widenings.
Other Design Aspects

- Access Management
- Transit
- Landscaping
- Utilities
- Next Steps
Access Management

There is a high concentration of accesses within the study area. Managing access alleviates traffic congestion and back-ups, reduces fuel consumption/vehicular emissions, and improves safety.

The Project Team has identified some commercial accesses that are recommended for modification (e.g., change to right-in / right-out or closure) based on:

**Issue:** Existing access from side street and main street

**Issue:** Multiple accesses from main street

All access management recommendations are will be considered by the City through redevelopment of the corridor in the long term.

See Preliminary Preferred Plans available on the tables.
The London Transit Commission (LTC) operates three (3) bus routes along Wharncliffe Road South within the study area.

The Project Team is recommending changes (shown on the preliminary design plans) to the existing bus stop locations to improve bus operations and reduce delay to through traffic.

*See Preliminary Preferred Roll Plans indicating potential bus stop modifications.*
A variety of design features or elements have been considered to enhance the function and character the Wharncliffe Road South Corridor. Opportunities to accommodate design features depends on the right-of-way available.

**Streetscaping Opportunities and Considerations**

- **Pavement treatments**
- **Bike racks**
- **Intersection improvements**
- **Landscape planting & Trees**
- **Bus shelters**
- **planters**
- **Banners & signs**
- **Street furniture**
Streetscaping Opportunities and Considerations
Streetscaping Opportunities and Considerations

EXISTING CONDITIONS

SOUTH LONDON NEIGHBOURHOOD

SOUTHCREST NEIGHBOURHOOD

HERITAGE CONSERVATION DISTRICT & THE COVES ESA

- Showroom connection between the streets and the newly constructed Thames Canalway Park, which is a gateway to the Civic Greenway and Big Creek Floodway
- Encourage public participation in street design and development
- Consider the use of permeable pavement
- Incorporate rain gardens and green roofs
- Emphasize the importance of local history

LEGEND

- Proposed new streets
- Existing streets
- Proposed parks
- Existing parks
- Heritage Village
- Old South Heritage Conservation District
- Proposed paves
- Proposed intersection

OPPORTUNITIES

RESIDENTIAL / COMMERCIAL CORRIDOR - SOUTH LONDON & SOUTHCREST NEIGHBOURHOODS

- Incorporate streetscape treatments such as unique paving, concrete and asphalt, and planting in a way to celebrate the identity of these neighborhoods
- Incorporate green infrastructure in the corridor
- Provide public spaces along the corridor
- Incorporate rain gardens
- Emphasize the importance of local history
- Encourage public participation in street design and development

Wharncliffe Road South
Environmental Assessment Study

Public Information Centre #2
November 30, 2016
Streetscaping Opportunities and Considerations

**EXISTING CONDITIONS**

**SOUTHCREST/HIGHLAND NEIGHBOURHOOD COMMERCIAL CORRIDOR**
- Enhance walkability and pedestrian experience by improving sidewalks along commercial areas.
- Promote inclusivity such as bike lanes, bike racks, benches, sidewalk expansions.
- Plant trees where space allows, and use alternative planting methods to trees and shrubs in sensitive locations where traditional methods may not be suitable.
- Establish a cohesive identity using street furnishings, signage, and unique pavement treatments.
- Further enhance the function and aesthetics of the streetscape by working with adjacent property owners to enhance landscaping and public art installations along the right-of-way.

**BASE LINE RD E. INTERSECTION**
- This intersection is an important commercial gateway for shops along Wharncliffe at Lyme Line Rd. It can be improved as a pedestrian-friendly area.
- Pedestrian-level intersection enhancements: benches, bollards, planting, wayfinding elements can improve safety and legibility for all users.

**COMMISSIONERS RD INTERSECTION**
- This intersection marks the southern boundary of the Southcrest neighborhood. It's a transition to a relatively less dense area.
- Pedestrian-level intersection enhancements across the logo: pedestrian crossings are important and may include changes in pavers and/or plantings.
- Improve visual and physical connection to adjacent biking paths from this intersection.

**OPPORTUNITIES**
Municipal Services

- This study will coincide with other municipal servicing projects
  - R.V. Anderson Horton Street Sanitary Trunk Sewer
- Municipal services and utilities crossing the CNR Bridge will be re-aligned
- Improvements to the municipal services (water, sanitary, stormwater) along Wharncliffe Road South are being recommended for improvements
You can become involved by:

- Requesting that your name be added to the study mailing list
- Providing your feedback by completing a **comment sheet** and placing it in the box provided at this PIC, or sending comments by email or mail directly to one of the project team contacts:

**Thank you!**
Your involvement is essential to the success of this study.
We welcome your feedback!

Your comments are welcome at any time throughout the project, however, we ask that you provide your feedback with respect to the PIC 2 materials by **January 16, 2017** in order to allow us to incorporate critical information into the study at an early stage.