1.0 Background

During the public comment period for the Blackfriars Bridge Municipal Class Environmental Assessment, the Ministry of Environment and Climate Change (MOECC) received two Part II Order requests asking that the City of London (City) be required to prepare an individual environmental assessment for the proposed Blackfriars Bridge (Project).

On April 19, 2017, a letter was received from the Minister of MOECC, indicating that an individual environmental assessment is not required. The Minister also imposed three conditions on the Project:

1. Within 5 years of Project completion, the Proponent must submit a report with additional traffic studies to the Director of the Environmental Approvals Branch.

2. The City shall develop a Traffic Safety Plan for the Project, during the detailed design phase.
   a) The Traffic Safety Plan shall include a rationale for the use of a roundabout on Ridout Street.
   b) The Traffic Safety Plan shall include traffic, pedestrian, and cyclist safety mitigation measures that consider, but are not limited to:
      i. Signage
      ii. Line painting (Sightlines)
      iii. Calming measures (Streetscaping)
   c) The City shall consult with interested persons, including the requesters, on the Traffic Safety Plan prior to finalization of the Plan
   d) The City shall submit the final Traffic Safety Plan and documentation on consultation to the Director of the Environmental Approvals Branch prior to operation of the Project.

3. Once conditions 1 to 2 have been satisfied, the City shall notify the Director of the Environmental Approvals Branch.

This document addresses the second of the Minister’s conditions, to document the Traffic Safety Plan.

2.0 Traffic Safety Plan –Features

Traffic safety planning has been an integral part of the City’s approach to the project, beginning with the risk assessment in 2012 (where risks with westbound vehicle traffic were identified), followed by the bridge inspection and evaluation in 2013 (where condition and capacity of the bridge was investigated), the environmental assessment in 2016 (where a range of alternatives were evaluated with the public and technical professionals and a selection was made) and the detailed design in 2017 (where specific details are finalized).

Key features of the traffic safety design (e.g. Westbound turn around area, traffic calming, clearance beam) were identified in the Municipal Class Environmental Assessment documentation. During the detailed design phase, additional traffic safety measures were incorporated into the design. These features of the Traffic Safety Plan are described in the drawings and specifications of the detailed design, and are summarized below.

2.1 Westbound Turnabout

The Traffic Safety Plan includes the use of a turnabout detail on Ridout Street, which is needed for a number of reasons, including, but not limited to, the following:

- It provides a safe right of way for westbound vehicles on Ridout Street to turn around. Otherwise, westbound vehicles would have to undertake a less safe manoeuvre, such as a three-point turn, and large vehicles would have to drive in reverse on a City road, which is unacceptable (Appendix A provides a plan of the turnabout area, with dimensions and lane widths shown).
- It stops westbound vehicles to allow an appropriate amount of time to look for oncoming traffic and accomplish a safe manoeuvre.
- It provides a median barrier to deter westbound vehicles from erroneously entering the one-way portion of the road in the wrong direction.
- It provides a place for snow removal vehicles to operate effectively.
- It provides a safe transition from two way traffic to one way traffic with bicycle contraflow lane
- It allows two-way traffic in the area of Ridout Street with driveways.

Appendix B provides the plan which illustrates the pavement markings and signage for the turnabout area.
2.2 Traffic, Pedestrian and Cyclist Safety

The Traffic Safety Plan has addressed traffic, pedestrian, and cyclist safety mitigation measures using signage, line painting, traffic calming and other measures, in the following ways:

- Reduction of traffic volume and driver confusion by converting the bridge from two-way traffic to one-way traffic. Traffic counts and modelling suggests that this change will reduce the traffic crossing the bridge by 40%, with benefits to the approach roads in reduced traffic.
- Provision of a separated bicycle lane for westbound cyclists.
- Provision of a Type ‘C’ Pedestrian Crossover at the Thames Valley Parkway intersection with Ridout Street including button activation and flashing lights, requiring vehicles and cyclists to stop for pedestrians crossing the street. The pedestrian crossover includes line painting to clearly delineate pedestrian right of way when the signals are flashing.
- Provision of a speed table (i.e. raised roadway) on the west approach to the bridge to reduce operating speeds on the road (speed calming).
- Provision of overhead clearance beams and signage to reduce the risk of oversize vehicles colliding with the bridge structure.
- Provision of single-file cycling access across the bridge for cyclists travelling in the eastbound direction, with appropriate signage and line and symbol painting.
- Continued separation of pedestrian users of the road and bridge on the sidewalk.
- Continued posting of the bridge for reduced load capacity, eliminating trucks from the bridge.

The pavement marking plan in Appendix B illustrates the locations of signage, pavement markings as well as the Type C PXO location on the east side of the bridge. The design of the PXO and the cycling markings has been prepared in accordance with City of London Standards and Ontario Traffic Manuals. Details of the speed table and the overhead clearance beam are provided in Appendix C.

2.3 Traffic Management During Construction

The roadway will remain closed to vehicular traffic during construction. Information signing and pedestrian traffic measures to be in place during construction include a Traffic and Pedestrian Management Plan with information signage (see Appendix D). Also included in Appendix D are operational constraints that limit the timing of closures to the trails adjacent to the project.

Provision has also been made in the contract for police presence to be implemented for pedestrian and cyclist safety during key operations, such as the lifting and reinstatement of the bridge.

3.0 Consultation

City consultation with interested persons, including the requesters, on the Traffic Safety Plan prior to finalization of the Plan includes the following:

- Public Information Centre (PIC) held in the community. Notices of the PIC were distributed in advance. [June 7, 2017 from 5:00 pm to 8:00 pm]
- Web Site access at www.blackfriarsbridge.ca
- Private discussions and meeting(s) with the Part II Order requesters
- (Many traffic safety plan features were identified and documented through the Municipal Class EA process and shared through PICs and on the web site accordingly.)

Appendices
Appendix A – New Construction Plans
Appendix B – Pavement Markings Plan
Appendix C – Speed Table and Clearance Beam Drawings
Appendix D – Measures During Construction
Appendix A

New Construction Plans
Appendix B

Pavement Markings Plan
Appendix C

Speed Table and Clearance Beam Drawings
Appendix D

Measures During Construction
NOTES:
1. A 1.8m CONSTRUCTION FENCE IS REQUIRED AT ALL TIMES TO SECURE AREA ADJACENT TO THE BRIDGE AND TO PREVENT ACCESS TO THE BRIDGE. THE FENCE MUST BE LOCATED TO THE OUTSIDE OF THE ROADWAY.
2. DURING TIMES WHEN THE CONTRACTOR IS NOT ACTIVELY WORKING ON SITE, THE FOLLOWING ADDITIONAL MEASURES ARE REQUIRED ON BOTH THE EAST AND WEST APPROACHES TO THE BRIDGE:
   a. 1.8m-HEIGHT TEMPORARY CURVED SECURELY AT THE EA, WHICH MEETS ALL THE REQUIREMENTS OF THE ONTARIO BUILDING CODE.
   b. BRIDGE SHIELD SHALL BE LOCATED BETWEEN THE BRIDGE ABUTMENT AND THE THAMES VALLEY PARKWAY AND SHALL BE SECURED TO A 1.8m HEIGHT TEMPORARY FENCE AT THAMES VALLEY PARKWAY WITH 100mm MAXIMUM OPENING ACCESS TO AND FROM THE THAMES VALLEY PARKWAY SHALL BE PROVIDED AT ALL TIMES, EXCEPT WHERE SPECIFIED ELSEWHERE.

LEGEND:
ADVANCE CLOSURE SIGNAGE (TYP.)
TEMPORARY CONCRETE BARRIER
1.8m CONSTRUCTION FENCE

BLACKFRIARS BRIDGE CLOSED TO PEDESTRIANS - USE ALTERNATIVE ROUTE

BLACKFRIARS BRIDGE REHABILITATION

Corporation of the City of London
Traffic & Pedestrian Management

Dillon Consulting

163809

Page 1 of 1
1. DESCRIPTION OF WORK

i) Blackfriars Bridge Rehabilitation

This work includes the rehabilitation of Blackfriars Bridge which is a heritage bridge constructed in 1875. The work includes the removal and reinstallation of the bridge for rehabilitation and replacement of structural components. The work also includes roadway approach works, electrical and landscaping.

2. CONSTRUCTION SCHEDULING AND OPERATIONAL CONSTRAINTS

This contract is a completion date contract that requires the Contractor to achieve substantial completion by November 2, 2018. The following provides the scheduling and operational constraints which shall be strictly adhered to:

i) Schedule Maintenance

Prior to construction, the Contractor shall provide a detailed construction schedule for review by the City of London and the Contract Administrator. The schedule shall illustrate the critical path operation for the project, which will be used in determining the controlling operation. The schedule shall be updated by the Contractor as the work progresses and will be reviewed at each site meeting.

ii) In-Water Work

The contractor is advised that approval for in-water work in the Thames River has not been requested. It is the Contractor’s responsibility to apply for and obtain any approvals required, should in-water work be required by their operation. No changes to the completion date of the contract will be considered to accommodate in-water work or related permitting requirements.

iii) Access to Residential Properties

Vehicular and pedestrian access shall be maintained at all times during the project to residences on Ridout Street and Blackfriars Street. The Contractor’s Traffic Control plan must provide details of how access will be maintained.

iv) Access Along Thames Valley Parkway

Pedestrian and cycling access shall be maintained along the Thames Valley Parkway (TVP), subject to the following time restrictions:

- Access along the TVP, on the east side of the Thames River, including the crossing of Ridout Street, shall be maintained at all times, except for a period not exceeding 2 (two) calendar days to allow the construction of the plaza area on Ridout Street and Ridout Street itself.
- Access along the TVP, along the west side of the Thames River may be closed for a period of 6 (six) weeks during the bridge removal operation and for a period of 8 (eight) weeks to allow for the placement of the rehabilitated bridge.

v) Tree and Vegetation Removals

Tree and vegetation removals must be completed outside of the general breeding bird window of April 1 to August 31 of any given year.

vi) Timing of Ridout Street and Blackfriars Street Reconstruction

Ridout Street and Blackfriars Street roadworks (including removal of the existing asphalt) shall be scheduled to minimize the duration of non-asphalt roadway (either existing or new asphalt). Once the existing asphalt is removed, the roadworks shall be completed up to base asphalt within a four week duration.

vii) Special Requirements Related to the Union Gas Pipeline

The contractor’s attention is drawn to the presence of the Union Gas pipeline within the contract area. The contractor shall ensure compliance with all Union gas requirements for working around live lines, including, but not limited to completing a Pipeline Load Analysis Form 8496 and supporting equipment information (see Appendix A) and send to Pipeline Engineering, Chatham Corporate Office, to determine the stresses induced on the pipeline and identify possible mitigating procedures. This includes all equipment passing over the gas main, as well as the crane used to remove and place the bridge structure.

3. APPROVALS

The following approvals are underway and must be finalized prior to award of the construction:

- Upper Thames River Conservation Authority application for consent.
- City of London Heritage Alteration Permit.
- Approval from the Ministry of the Environment and Climate Change of the Project Traffic Safety Plan (for in-service configuration following construction).

4. COORDINATION WITH UTILITIES AND CONSTRUCTION START

a) Protection of Utilities

Existing utilities within the construction limits will remain in the approximate locations shown on the Contract Drawings.

The Contractor is required to protect and support utility under-crossings and overhead lines at no additional payment unless noted otherwise in the Form of Tender. Support of the existing utilities will be considered incidental to the installation of sewers, watermains, associated services and surface works. The Contractor shall arrange for temporary support of hydro poles with London Hydro or Bell Canada, as appropriate, and support costs will be paid under the appropriate tender item for the work.

b) Utility Relocation By Others

The existing Bell and Rogers poles on Ridout Street will be relocated (by others) prior to June 2018. The contractor shall vacate the area of this relocation work, to allow adequate separation between this utility relocation work and the contractors work area on Ridout Street.