



January 29, 2009
Our Ref.: 33015835

Michael Shaw, P.Eng
Environmental Protection Operations Division Ontario
Environment Canada
867 Lakeshore Road, P.O Box 5050
Burlington, Ontario, L7R 4A6

Attention: Michael Shaw

Re: Detroit River International Crossing Environmental Assessment Study

Dear Mr. Shaw:

Thank you for your comments submitted in response to the Draft Environmental Assessment (EA) Report made available for public, agency and stakeholder review between Wednesday, November 12, 2008 and Friday, December 12, 2008.

Additional information or clarification has been provided in the final EA Report to address the comments and recommendations raised in your letter dated December 12, 2008. Based on your comments and on comments received from other agencies and stakeholders, additional information has been provided in the final EA Report on the recommended stormwater management plan, surface water and groundwater, migratory birds, species at risk, and future monitoring of environmental impacts and protection.

It is recognized that Environment Canada was unable to review the technical supporting documents prior to commenting on the draft EA Report. All technical documents (including the Natural Heritage and Air Quality Impact Assessment reports) supporting the information contained in the EA Report are now available to be reviewed by Environment Canada and can be found on the project website at www.partnershipborderstudy.com. Hard copies of the EA Report along with a DVD containing all supporting documents were forwarded to your office on January 5, 2009.

The following responds to your comments submitted on the draft EA Report. The response has been structured to follow the major headings provided in your letter, as follows:

Water Quality and Quantity

Additional text on stormwater management quality and quantity treatment has been provided within **Chapter 9 (Section 9.1.5, 9.2.6 and 9.3.7)** and **Chapter 10** of the final EA Report. Additional discussion on surface water has been incorporated into **Section 10.4.9** (Drainage and Stormwater Management) of the final EA Report, and a section on groundwater quality and quantity has been added as **Section 10.4.8**. Please refer to these sections of the final EA Report for a detailed discussion of these items.

Regarding the assessment of surface water and groundwater and your comment that baseline information on water quality in watercourses and groundwater resources potentially impacted by the proposed undertaking are not included, we note that baseline water quality conditions have not been assessed as the existing conditions for Highway 3, Huron Church Road, and EC Row Expressway consists of uncontrolled runoff and pollutants discharging

URS Canada Inc.
75 Commerce Valley Drive East
Markham, ON Canada L3T 7N9
Tel: 905.882.4401
Fax: 905.882.4399
www.urs.ca



directly to receiving watercourses. The proposed condition for the majority of the roadway and plaza is to provide Enhanced Protection Level stormwater management practices as per the Ontario MOE document "Stormwater Management Planning and Design Manual" dated 2003, providing quality and quantity treatment to the study area where currently no treatment is provided. This will provide an overall net benefit to the receiving watercourses within the study area in terms of overall pollutant loadings from suspended solids. Additional details and commitments have been added to **Section 10.4.8** and **10.4.9**.

Regarding your concern about potential transboundary effects due to bridge operation and in-water works close to the international border, **Section 10.4.4** notes that the magnitude of effects to fish species should be minimized through the employment of timing windows for in-water work. In-water work should commence only when all materials are present and be staged to minimize duration. The in-water construction timing restriction should reflect the warmwater fish communities present (April 1 to June 30) with an extension to March 16 to account for northern pike migration.

Based on the proposed stormwater management plan and the study team's assessment of existing groundwater conditions, no adverse effects are anticipated on other environmental and socio-economic components (e.g., vegetation communities, recreational users, etc.), due to potential project effects on surface and groundwater resources. This will be confirmed during future design stages, as the concept design and associated stormwater management and groundwater provisions are further refined.

Regarding your comments on the assessment of stormwater management plans for the proposed bridge crossing, the study team apologizes for the delay in providing a response to the comments submitted by e-mail dated July 16, 2008. As discussed in your comments on the draft EA Report, deck drains are not proposed on the main bridge crossing and runoff from the crossing will be collected and conveyed for quality treatment on land prior to discharging to the Detroit River. Please note that designs for runoff treatments for the main crossing structure will be done as the design progresses. While utilizing deck drains to release discharge directly to the Detroit River are not being considered, options include a pipe system under the crossing and through the structure towers. If design of a pipe system to convey runoff from the crossing structure is feasible, then runoff can be piped to a treatment facility (wetpond or grassed swales) where quality, quantity and erosion treatments can be provided as per the MOE requirements. The feasibility, sizing and location of the treatment facility will be confirmed during future design stages. This additional information has been incorporated into **Sections 9.1.5** and **10.4.9** of the final EA Report.

In addition, your letter suggests that additional information be included in the EA Report regarding proposed spill contingency/management plans, and measures to minimize use of de-icing chemicals and their potential adverse effects on the environment. Additional text has been added to **Section 10.4.9** of the final EA Report regarding these issues, including the information below:

"To account for potential contaminant spills (e.g. oil, chemical, etc.) on the crossing structure and within the plaza area, design details will be developed during future design stages in accordance with applicable standards. For the plaza area, a shut-off valve or other alternative damming procedures may be proposed for the adjacent stormwater management ponds. The preferred treatment will be determined during future design stages.

MTO employs and recognizes the importance of best salt management practices and has developed a Salt Management Plan in accordance with Environment Canada's Code of Practice for the Environmental Management of Road Salts (Environment Canada, 2004). MTO follows best management practices for road salt management, which are consistent with the best practices in



North America. MTO partners with stakeholders using the latest technology, tools and methods to keep roads safe for winter driving and to minimize salt usage. Best management practices include advanced weather forecasting, electronic spreader equipment, the use of brines in pre-wetted salt, and varying application rates of road maintenance materials to match weather conditions. MTO will continue to investigate de-icing alternatives to control and reduce salt usage while ensuring highway safety."

Wildlife, Including Migratory Birds and Species at Risk Issues

Migratory Birds

The study team recognizes the concerns of Environment Canada regarding potential impacts to migratory birds and bird habitat associated with project construction, operation or maintenance activities of the Recommended Plan. As noted in **Section 10.4.5**, a new crossing of the Detroit River may result in migratory and resident bird mortality along the Detroit River. The degree to which the new crossing may result in bird mortality depends on the species, population size and the behaviour of the migratory and resident birds present. The following paragraphs summarize the major commitments made in the EA Report regarding migratory birds. Additional details are provided in the Natural Heritage Impact Assessment – Recommended Plan report (December, 2008).

It is recognized that lighting and illumination of the main bridge structure and bridge facility may pose a hazard to nocturnal bird species, with the degree of hazard also being a function of the bridge type (cable-stayed or suspension). Bridge lighting, including the need and treatment of showcase lighting to highlight the architectural amenities of the bridge, will be reduced while still satisfying the principal needs of lighting as a safety enhancement. Architectural lighting to highlight the aesthetics of the bridge should be developed with consideration for its effect on migratory birds. Site specific mitigation measures will be developed during future design phases.

Comments have been included in the final EA Report about the potential for further study of the populations and behaviours of migratory and resident bird species in the vicinity of the Detroit River crossing (see **Sections 10.4.5** and **10.5.3**). Consideration should be given to conducting a migratory bird survey at the location of the crossing to ascertain the species, population size and behaviour of birds migrating through and residing along the Detroit River. The investigations should include mobile radar studies in association with acoustical recordings and point count surveys during peak spring and fall migration periods. Further discussion will be undertaken with Canadian and U.S. wildlife authorities to determine the need and level of assessment required.

Regarding your comments on the recommended timing for construction activities with the potential to destroy migratory birds, such as vegetation clearing, **Section 10.4.5** of the final EA Report notes that, where necessary, vegetation removals should occur outside the growing season to avoid loss of wildlife and wildlife habitat to the extent possible. The section notes that a construction timing restriction extending from May 1 to July 23 has been recommended by Environment Canada to avoid the incidental take of migratory birds. If vegetation removals are required during this period, a nest survey should be conducted by a qualified avian biologist immediately prior to commencement of construction to identify and locate active nests of migratory birds and to develop a mitigation plan.

Species at Risk

Sections 10.4.2, 10.4.3 and **10.4.5** of the EA Report summarize the potential environmental effects and mitigation measures associated with species at risk potentially impacted by the Recommended Plan. In general, mitigation measures that will be employed to limit impacts to species at risk include:



- Avoiding vegetation removal in the vicinity of species at risk and their habitat during the growing season;
- Seeking opportunities to forge partnerships with parties to relocate species to lands in public ownership, to otherwise restore and enhance these lands with native plants and species at risk and to transfer lands within The Windsor-Essex Parkway to parties that can best protect sensitive areas; and,
- Seeking opportunities to dedicate portions of natural areas to appropriate parties for protection. Lands will be available to be dedicated for protection including provincially rare vegetation communities, habitat for species at risk, wildlife corridors and other ecological functions.

While the final EA Report includes a summary of potentially impacted species at risk and mitigation measures, please refer to the Natural Heritage Impact Assessment – Recommended Plan report (December, 2008) for complete details of each of the impacted species at risk, including recommended environmental protection measures, monitoring and follow-up.

Wildlife Habitat and Restoration

As discussed in **Section 10.4.2** and recommended in your letter, landscape plantings included as part of the Recommended Plan should be limited to native, non-invasive species typical of the tallgrass prairies/Carolinian forest within the plaza site. Restoration, enhancement and land securement opportunities should be explored for lands such as the Black Oak Woods adjacent to the inspection plaza and The Windsor-Essex Parkway.

The detailed landscape plan to be prepared during later design stages will identify areas for protection, enhancement and restoration. The landscape plan will include detailed prescriptions for vegetation management including edge management plans, soil management plans, use of native and noninvasive plant materials, prairie disturbance regimes, control of exotic and invasive species and management of species at risk. Additional details regarding wildlife habitat and restoration are provided throughout Chapter 10 of the final EA Report and in the Natural Heritage Impact Assessment – Recommended Plan report (December, 2008).

Monitoring

As noted in your letter and in **Section 10.6** of the final EA Report, project monitoring will be an important measure implemented during construction of the Recommended Plan to help ensure mitigation measures and key design features are consistent with the approvals of the EA and in accordance with the contract. In addition, **Section 11.2** provides details on the commitment to a compliance monitoring plan will be used during future stages of design to help ensure commitments made in the EA are met. **Section 11.4** of the final EA Report provides details of the Environmental Management System (EMS) that will be developed and implemented to help ensure that the Windsor Essex Parkway is operated and maintained in a manner consistent with the principles derived through the EA process.

Environmental Protection

As outlined in your letter and in Chapters 10 and 11 of the final EA Report, mitigation measures and monitoring documented in the EA Report will be developed in conformance with MTO's Environmental Protection / Technical Requirements and Environmental Guidelines, and implemented utilizing any appropriate standards/environmental provisions/practices referenced in the MTO's Environmental Reference for Contract Preparation.



As you are aware, the final EA Report, which reflects comments received from all stakeholders during the review period noted above was filed with the Ontario Ministry of the Environment (MOE) on December 31, 2008. This report has been circulated to external stakeholders including Environment Canada and other relevant agencies, municipalities, and First Nations, and has also been made available for public review at a number of review locations within the study area (refer to enclosed *Notice of Submission of Ontario Environmental Assessment*). As per the notice of submission included with the final version of the EA Report, comments on the EA Report should be submitted in writing and/or by fax to the Ministry of the Environment by **Friday February 27, 2009**. All comments must be submitted to:

Catherine McLennon, Special Project Officer
Ministry of the Environment
EA Project Coordination Section
Environmental Assessment and Approvals Branch
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario, M4V 1L5
Tel: 416-314-7222/1-800-461-6290
Fax: 416-314-8452

A Canadian Environmental Assessment Act (CEAA) report is currently being prepared, and will be submitted to the Canadian Environmental Assessment Agency (CEAA) early in 2009.

We trust that the above letter adequately addresses your comments. If you have any further comments or require additional information, please feel free to contact us through the project website at www.partnershipborderstudy.com, or by calling the Project Toll Free number at 1-800-900-2649.

Again, thank you for your participation and comments.

Yours very truly,

Murray Thompson, P.Eng.
Consultant Project Manager

cc. Catherine McLennon, MOE
Dave Wake, MTO
Roger Ward, MTO
Joel Foster, MTO

Encl.

URS Canada Inc.
75 Commerce Valley Drive East
Markham, ON Canada L3T 7N9
Tel: 905.882.4401
Fax: 905.882.4399
www.urs.ca

