

Draft EA Guidelines

Under the *Canadian Environmental Assessment Act*

for the

Detroit River International Crossing Project

November 2006

BORDER TRANSPORTATION PARTNERSHIP

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1.0 PURPOSE

The purpose of this document is to provide guidance on the federal environmental assessment (EA) to be conducted for the Canadian portion of the Detroit River International Crossing (DRIC) Project in Windsor, Ontario. This project is being undertaken by Transport Canada (TC) and the Ontario Ministry of Transportation (MTO), under the umbrella of the Border Transportation Partnership, which also includes the United States Federal Highway Administration and the Michigan Department of Transportation.

The purpose of the project is to provide new border crossing capacity between Windsor, Ontario and Detroit, Michigan. The project includes the construction and operation of a new international bridge across the Detroit River, the associated customs inspections facilities, and the connecting approach road to Highway 401. The study is being coordinated with a parallel effort in the United States, which will include, in addition to the international bridge, a corresponding border services plaza and a roadway connection between the new bridge and the freeway system on the U.S side of the Detroit River.

In Canada, a federal EA of the proposed project is required under the provisions of the *Canadian Environmental Assessment Act* (CEAA). This document (henceforth referred to as EA Guidelines) describes the basis for the conduct of the federal EA, and for focusing the assessment on relevant issues and concerns. The document also provides direction on how to document the federal EA process. In addition, the EA Guidelines provide a means of communicating the federal EA process to stakeholders.

It should be noted that the federal EA process is being coordinated with the Ontario provincial EA process, which formally began in February 2005. Information on how the federal and provincial processes are being coordinated is provided throughout this document.

2.0 BACKGROUND

The purpose of the DRIC project is to provide for the safe, efficient and secure movement of people and goods across the Canadian-U.S. border in the Detroit River area to support the economies of Ontario, Michigan, Canada and the U.S. In order to meet the purpose, the project must address the following regional transportation and mobility needs:

- Provide new border crossing capacity to meet increased long-term travel demand;
- Improve system connectivity to enhance the continuous flow of people and goods;
- Improve operations and processing capabilities at the border; and
- Provide reasonable and secure crossing options (i.e., network redundancy).

Transport Canada, together with its partners MTO, the Michigan Department of Transportation and U.S. Federal Highways Administration, is committed to planning, designing and implementing the DRIC Project in an environmentally sensitive manner. As such, a coordinated study process has been developed to assist in minimizing environmental impacts and to address

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the identified transportation problems. The coordinated EA will include the completion of environmental and technical work to allow the governments to decide on the location of a new or expanded crossing in an environmentally responsible manner.

Due to the nature of the project, and the complexity of border transportation issues in the Windsor-Detroit area, this work is necessary to meet the legislative and regulatory requirements of the *Canadian Environmental Assessment Act*, the *Ontario Environmental Assessment Act* and the *U.S. National Environmental Policy Act*. The Ontario Ministry of Transportation is leading the Canadian work program in coordination with Transport Canada. The Michigan Department of Transportation, in coordination with the U.S. Federal Highway Administration, is leading the U.S. work program. Further details on the coordination of the Canadian work program are provided in section 5.0.

3.0 APPLICATION OF THE CANADIAN ENVIRONMENTAL ASSESSMENT ACT

As a co-proponent of the Canadian portion of the project, TC has determined that an EA is required pursuant to subsection 5(1)(a) of the CEAA. As such, TC has also identified itself as a Responsible Authority (RA) for the assessment. Other federal approvals may also be required (see Section 4.0).

The project is not described in the *Comprehensive Study List Regulations* of the CEAA; therefore, section 18(1) of the CEAA requires TC to ensure that a screening-level assessment of the project is carried out before taking any action that would allow the project to proceed, in whole or in part.

4.0 IDENTIFICATION OF OTHER FEDERAL DEPARTMENTS

On August 24, 2005, a Project Description was submitted to the Canadian Environmental Assessment Agency for circulation to federal authorities in accordance with the *Federal Coordination Regulations*. The Project Description provided background information on the project, as well as general information on its proposed location. The Project Description provided available project information, including preliminary information on components/structures (e.g., roadways, ramps, bridges, rail crossings, etc.), facility characteristics (e.g., number of lanes, right-of-way requirements, etc.), project activities, resource/material requirements and waste disposal.

At this time, only TC has confirmed that it is an RA under CEAA for this screening, both as a proponent, and because the project would require an approval under the *Navigable Waters Protection Act*, which is identified in the *Law List Regulations*. However, Fisheries and Oceans Canada has identified themselves as a potential RA, and will participate actively in the EA process. DFO will confirm their EA responsibilities later in the EA process, as additional project details become available.

The Windsor Port Authority (WPA) is a potential Prescribed Authority will actively participate in the process until its EA responsibilities can be confirmed. To determine whether the WPA

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will be a Prescribed Authority, the WPA will need to know whether federal water lots or WPA lands are required for the project to proceed. If the WPA is a Prescribed Authority, the *Canada Port Authority Environmental Assessment Regulations* would apply.

Following the circulation of the project description, a number of federal authorities also identified themselves as having specialist or expert advice that may contribute to the conduct of the assessment, including: Environment Canada, Health Canada, Fisheries and Oceans Canada, Natural Resources Canada, Foreign Affairs Canada, the Canadian Transportation Agency and the Canada Border Services Agency. They will participate as expert federal authorities in the EA process. Since the assessment is multi-jurisdictional, the Canadian Environmental Assessment Agency is serving as the Federal Environmental Assessment Coordinator (FEAC). Together, these departments comprise the federal review team.

5.0 COORDINATION WITH THE PROVINCIAL ENVIRONMENTAL ASSESSMENT PROCESS

As this project is undergoing an Individual EA under the Ontario *Environmental Assessment Act*, the EA processes will be coordinated pursuant to the *Canada-Ontario Agreement on Environmental Assessment Cooperation* (the Agreement), which states that federal and provincial governments:

“will coordinate the environmental assessment processes whenever projects are subject to review by both jurisdictions ... The agreement maintains the current level of environmental standards and the legislative and decision-making responsibilities of both governments. While projects requiring both provincial and federal environmental assessment approvals will still require separate approvals, decisions will be based on the same body of information and there will be an ability to make decisions concurrently”.

Although many project details are still under development, the federal EA was initiated early in the project planning stages, in order to maximize opportunities for coordination with the provincial EA process.

In developing these EA Guidelines, consideration has been given to the requirements of the Ontario *Environmental Assessment Act* and the Work Plans that were developed as part of the individual EA process, with a view to coordinating information requirements and avoiding or minimizing duplication of effort. Consistent with this, the technical studies that are being prepared as part of the provincial individual EA process will form the basis for meeting the requirements of the *Canadian Environmental Assessment Act*. It should be noted that federal departments provided input to the Work Plans, as part of the coordinated process. Specific federal requirements are further outlined in this document. Coordination of public review activities is described in section 9.8.

6.0 PREPARATION OF ENVIRONMENTAL ASSESSMENT DOCUMENTATION

MTO is leading the Canadian portion of the DRIC study, in cooperation with TC. Together, MTO and TC have retained a consulting team, led by URS Canada, to complete the technical studies and documentation for the coordinated EA process.

TC, based on the authority provided in subsection 17(1) of the CEAA, will delegate to MTO and the consultant team, the coordination and development of technical support studies for the EA, the development and implementation of a public consultation program, and the preparation of an EA screening report (EASR). As noted above, the technical studies that are being prepared for the provincial individual EA will be used by federal departments in assessing the project.

In coordination with the Ontario Ministry of the Environment (MOE), and in accordance with the Agreement, MTO and the consultant team will submit the EASR and technical support studies to the Canadian Environmental Assessment Agency, in its capacity as the FEAC. The Agency will distribute the EASR and supporting documentation to the federal review team for review and comment. Based on comments received, the federal review team may request revisions to the EASR. A number of iterations may be required before the report is considered complete. A consultation plan will be developed in consultation with the Canadian Environmental Assessment Agency and the MOE to outline how the public review process will be coordinated.

7.0 PUBLIC REGISTRY

TC has established a Public Registry for the assessment, as required by section 55 of the CEAA. This includes the posting of the assessment in the Canadian Environmental Assessment Registry (CEAR), which can be accessed on the Internet Web site of the Canadian Environmental Assessment Agency (www.ceaa.gc.ca). The CEAR number for this project is 06-01-18170. The CEAR will include the following documentation:

- Description of the project
- Notices of commencement and termination
- Scope of the factors to be considered
- Notices requesting public input; and
- EA decisions.

Interested parties will be able to obtain copies of these documents by accessing the CEAR website and downloading the files. Interested parties may obtain copies of specific documents on the Document List from the contact at TC (see Section 11.0).

8.0 SCOPING

8.1 Scope of the Project

In accordance with section 15(3) of CEAA, the scope of the project must include “*in relation to a physical work, any construction, operation, modification, decommissioning, abandonment or other undertaking in relation to the physical work that is proposed by the proponent, or that is likely to be carried out in relation to that physical work*”.

In establishing the scope of a project for a screening-level assessment under CEAA, the physical works that are involved in the proposal, and any specific undertaking that will be carried out in relation to those physical works, must be determined.

The specific characteristics of the project components EA process will be determined through the EA process at a preliminary design level of detail. Drawings and plans of the project will be prepared during the EA. However, at this stage of the EA, the scope of the project for this assessment will include the construction, operation and decommissioning (where applicable) of the following components:

- A six-lane bridge crossing of the Detroit River, designed to provide navigational clearances in accordance with U.S. and Canadian requirements; depending on the location of a bridge crossing, and the width of the river at that location, there may or may not be piers located in the water;
- Border services plazas; the Canadian customs inspection plaza will be sized to meet the needs of the Canadian Border Services Agency and other border-related stakeholders; preliminary discussion have indicated that approximately 80-100 acres will be needed; a conceptual layout of the plaza, including buildings and vehicle and pedestrian flow paths will be developed as part of this EA; and
- A controlled access highway connection between the border services plaza and the provincial highway network; this connection is likely to be a six-lane divided highway with interchanges at major road crossings, grade separations/road closings at minor road crossings and grade separations at rail crossings. Where this controlled access highway encounters watercourses, crossings may or may not have structures located in the water, depending on the location and the width of the water body at that location. The width of the right-of-way to accommodate this highway is expected to be approximately 80 to 100 m, with additional property required in areas of significant grading and at grade separations and interchanges. A variety of cross sections will be considered, including an at-grade roadway, a depressed roadway, or a tunnelled roadway. The use of service roads to facilitate local traffic access will also be considered.

The EASR will provide a complete description of each component of the project, and the associated physical works and activities. The scope of project may be further refined as additional information regarding the specific project components becomes available.

8.2 Scope of Assessment

Section 16(1) of the CEAA identifies the factors that need to be considered in an EA at the screening level:

- 16(1) *Every screening...shall include a consideration of the following factors:*
- (a) the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out;*
 - (b) the significance of the effects referred to in paragraph (a);*
 - (c) comments from the public that are received in accordance with this Act and the regulations;*
 - (d) measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project; and*
 - (e) any other matter relevant to the screening... that the responsible authority... may require to be considered.*

It should also be noted that that the definitions of *environment* and *environmental effect* under the CEAA are as follows:

"**Environment**" means the components of the Earth, and includes:

- a) land, water and air, including all layers of the atmosphere;*
- b) all organic and inorganic matter and living organisms; and*
- c) the interacting natural systems that include components referred to in paragraphs (a) and (b).*

"**Environmental effect**" means, with respect to a project:

- a) any change that the project may cause in the environment, including any change it may cause to a listed wildlife species, its critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of the Species at Risk Act,*
- b) any effect of any such change referred to in paragraph (a) on*
 - (i) health and socio-economic conditions,*
 - (ii) physical and cultural heritage,*
 - (iii) the current use of lands and resources for traditional purposes by aboriginal persons, or*

- (iv) *any structure, site or thing that is of historical, archaeological, paleontological or architectural significance, or*
- c) *any change to the project that may be caused by the environment,*
- whether any such change or effect occurs within or outside Canada.*

When these terms are used in this document their meaning is as defined above.

The scope of the assessment for the DRIC Project shall include environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project, and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out. With the discretion allowed for in paragraph 16(1)(e) of the CEEA, the RA(s) will also consider the purpose of the project, the need for the project and the benefits of the project, as part of the coordinated EA process.

Additional or more specific factors or issues to be addressed in the EA may be identified following consultation with the expert Federal Authorities or other stakeholders during the EA process.

8.3 Scope of the Factors to be Considered in the Assessment

The scope of factors to be considered in the assessment should include, but may not necessarily be limited to, potential effects (including cumulative effects) on the following environmental components:

- Air quality and climate;
- Surface water and groundwater;
- Water levels and flows in the Detroit River (particularly if in-water structures are proposed)¹
- Surface and subsurface geology and soils;
- Vegetation, vegetation communities and wetlands;
- Fish and fish habitat;
- Wildlife, wildlife habitat and migratory birds;
- Species at risk
- Noise and vibration; and
- Contaminated sites and waste management.

In keeping with the definition of “environmental effect”, the scope of the factors also includes

¹ If in-water piers are proposed for the Detroit River, a comprehensive hydrotechnical analysis will be required to determine potential construction and operation impacts on water levels and flows in the river upstream and downstream of the bridge crossing location.

the effect of any change that the project may cause in the environment on:

- Human health and socio-economic factors;
- Physical and cultural heritage;
- Current use of lands and resources for traditional purposes by Aboriginal peoples; and,
- Things of historical, archaeological, paleontological or architectural significance.

More detail on each of these components is provided in Table 1 at the end of this document. This information may be revised as the assessment process proceeds, and more information is available on the location and design of the specific project components. However, Table 1 provides a summary of the key information requirements that must be addressed, in order to promote coordination with the provincial EA process.

9.0 ASSESSMENT METHODOLOGY

9.1 Content of the Environmental Assessment Screening Report

In keeping with the objective of coordinating the federal and provincial EA processes, the EASR should refer to background studies prepared for the provincial study. However, the EASR should contain enough basic information to support the conclusions that are drawn in the environmental effects analysis. Additional guidance on the level of detail that is required in the EASR may be provided later in the process.

The factors required by section 16(1) of the CEAA are to be considered systematically in the EASR. Specifically, the EASR will describe:

- Application of the CEAA
- Scope of the project
- Scope of the assessment
- Project description
- Spatial and temporal boundaries of the assessment
- Description of existing environment
- Assessment and mitigation of environmental effects
- Cumulative environmental effects
- Significance of residual effects
- Stakeholder consultation
- Follow-up program, if required; and
- Conclusions and recommendations for decision.

Details on specific information to be addressed in the EASR are provided in the following sections.

9.2 Project Description

The EASR should include a clear statement of the purpose of the project. The description of the purpose should also include a summary of the need for the project, referencing the supporting technical studies.

An adequate description of the project is required for the assessment of the environmental effects of the project. The project description will include a description of the construction and operations activities that are being proposed. The description of the project will refer to, and elaborate on, the items identified in the project scope, supported with appropriate maps and diagrams. In keeping with the objective of coordinating the federal and provincial EA processes, information in this section should refer to background studies prepared for the provincial study.

The main objective of the project description is to identify and characterize those specific components and activities that have the potential to interact with, and thus result in a likely change or disruption to, the surrounding environment, during construction, during normal operations, and in the event of malfunctions and accidents.

9.3 Spatial and Temporal Boundaries of the Environmental Assessment

The consideration of the environmental effects in the screening needs to be conceptually bounded in both time and space. This is more commonly known as defining the *study areas* and *time frames*, or spatial and temporal boundaries, of the screening assessment.

Study areas will encompass all relevant components of the environment including the people, biota, land, water, air and other aspects of the natural and human environment. Study boundaries will be defined taking into account ecological, technical and social considerations. The spatial boundaries shall reflect the geographic range over which the project’s environmental effects may occur, even if these effects extend beyond the project footprint.

The following geographic study areas are suggested as a reference point. It is expected that the spatial boundaries may vary for each environmental component, depending on the nature of the predicted effects. The specific spatial boundaries shall be explicitly defined in the EASR.

- | | |
|---------------------|---|
| Site Study Area | The Site Study Area is the project footprint. |
| Local Study Area | The Local Study Area is defined as that area existing outside the Site Study Area boundary, where there is a reasonable potential for the occurrence of environmental effects from the project. The boundaries may change, as appropriate, following a preliminary assessment of the spatial extent of potential environmental effects. |
| Regional Study Area | The Regional Study Area is defined as the area within which there is the potential for cumulative effects. |

The temporal boundaries for this assessment will establish over what period of time the project-specific and cumulative effects are to be considered, and should at a minimum address the planning horizon of the project (i.e., the year 2035).

Both the study areas and time frames will remain flexible during the assessment and may be changed as further information on the project and/or environmental effects becomes available.

9.4 Description of the Existing Environment

A description of the existing environment is required to determine the likely interactions between the project and the surrounding environment and, conversely, between the environment and the project. The environmental components that are typically described include, but are not necessarily limited to:

- Air quality and climate
- Surface water quality and quantity
- Groundwater quality and quantity
- Surface and subsurface geology and soils
- Vegetation, vegetation communities and wetlands
- Fish and fish habitat
- Wildlife, wildlife habitat and migratory birds
- Current use of lands and resources for traditional purposes by Aboriginal peoples;
- Species of special concern, including those species listed under the *Species at Risk Act*; and,
- Noise and vibration.

The required level of detail in the description of the existing environment will be less where the potential interactions between the project and various components of the environment are limited, or remote in time and/or space. In keeping with the objective of coordinating the federal and provincial EA processes, information in this section should refer to background studies prepared for the provincial study. However, the EASR should contain enough basic information to support the conclusions that are drawn in the environmental effects analysis.

9.5 Assessment and Mitigation of Environmental Effects

The consideration of potential environmental effects in the screening should be done in a systematic and traceable manner. The assessment methodology should be summarized. The results of the assessment process should be clearly documented using summary matrices and tabular summaries where appropriate.

The following provides further details on the assessment of effects caused by the project (Section 9.5.1), and the assessment of effects of the environment on the project (Section 9.5.2).

9.5.1 Assessment of Effects Caused by the Project

The assessment should be conducted in a manner consistent with the following general method:

- 1) ***Identify the potential interactions between the project activities and the existing environment during construction and normal operations, and during identified relevant malfunctions and accidents.***

Specific attention should be given to interactions between the project and the environment. In this step, standard design and operational measures that prevent or reduce the likelihood of interactions occurring with the environment should be reviewed. Opportunities for additional impact mitigation measures are addressed in step 3 below.

- 2) ***Describe the resulting changes that likely would occur to the components of the environment as a result of the identified interactions with the project.***

Each environmental change must be described in terms of whether it is direct or indirect, and positive or adverse.

Identified changes in socio-economic conditions and various aspects of culture, health, heritage, archaeology and traditional land and resource use should be focused on those changes that are likely to result from the predicted changes that the project is likely to cause to the environment. It is understood that the provincial environmental assessment will consider a broader range of direct social and economic effects.

Quantitative as well as qualitative methods may be used to identify and describe the likely adverse environmental effects. Professional expertise and judgment may be used in interpreting the results of the analyses. The basis of predictions (including data and modelling limitations/assumptions and inaccuracies) and interpretation of results, as well as the importance of remaining uncertainties, shall be clearly documented in the EASR.

- 3) ***Identify and describe technically and economically feasible mitigation measures that may be applied to each likely adverse environmental effect.***

Mitigation strategies should reflect avoidance, precautionary and preventive principles. That is, emphasis should be placed on avoiding or preventing the cause or source of an effect before addressing how to reverse or reduce an effect once it occurs.

The EASR shall identify measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project, including cumulative effects. Any proposed mitigation measures must be implemented to conform to any pertinent federal and provincial regulations, guidelines, standards, best practices and/or codes of practice, and the EASR shall indicate how this will be achieved.

Where the prevention of effects cannot be assured, further mitigation measures in the form of contingency responses, will be described.

4) Describe the significance of the environmental effects that likely will occur as a result of the project, having taken into account the implementation of the proposed mitigation measures.

The criteria for judging and describing the significance of the residual (post-mitigation) effects may include: magnitude; duration and frequency; ecological context; geographic extent; and degree of reversibility. Existing federal and provincial regulatory and industry standards and guidelines are relevant as points of reference for judging significance. Professional expertise and judgement will also be applied in judging the significance of environmental effect. All applicable federal and provincial laws must be respected.

The analysis must be documented in a manner that readily enables conclusions on the significance of the environmental effects to be drawn. The Responsible Authorities will make the final decision on the significance of the environmental effects.

9.5.2 Assessment of Effects of the Environment on the Project

The assessment must also take into account how the environment could adversely affect the project, for example, from seismic events or severe weather, including occurrences of extreme ice jam and high water level events. The assessment should also take into account any potential effects of climate change on the project, such as an assessment of whether the project might be sensitive to changes in climate conditions² during its life span.

This part of the assessment will be conducted in a step-wise fashion, similar to that described for the assessment of the project effects. The possible interactions between potential natural hazards and the project will be first identified, followed by an assessment of the effects of those interactions, mitigation measures, if required, and the significance of any remaining likely adverse environmental effects.

The emphasis in this section should be on environmental conditions that are reasonably plausible, but should not be limited to events that occur on a regular basis.

9.6 Assessment of Cumulative Effects

The effects of the project must be considered together with the effects of other projects and activities that have been, or will be carried out, and for which the effects are expected to *overlap* with those of the project (i.e., overlap in same geographic area and time). These are referred to

² For example, would roadway drainage structures be able to safely accommodate a modest increase in the frequency and intensity of precipitation extremes and associated flood flows that are expected to occur in the future (based on climate change predictions), than those provided for under current drainage design standards?

as *cumulative environmental effects*.

In order to consider the potential cumulative environmental effects of the project, the EASR should identify other projects and activities that have been or will be carried out in or around the study area, which have a potential to interact with the DRIC project. The emphasis in this section should be on “reasonably foreseeable” projects (e.g., projects that have been approved or that are currently advancing through the regulatory approvals process). Ongoing discussion with federal authorities will be required on the list of other projects and activities that should be addressed. As a starting point, effort should be made to identify other projects planned by local and regional governments, as well as provincial and federal agencies. The projects should not be limited to other transportation infrastructure projects, although specific attention must be paid to the relationship between the Canadian portion of the DRIC project, and the parallel work being undertaken in Michigan.

Generally speaking, the information available to assess the environmental effects from other projects can be expected to be more conceptual and less detailed as those effects become more remote in distance and time to the project, or where information about another project or activity is not available. The consideration of cumulative environmental effects may, therefore, be at a more general level of detail than that considered in the assessment of the direct project-environment interactions.

Where potentially significant adverse cumulative effects are identified, additional mitigation measures may be necessary.

9.7 Significance of Residual Effects

The preceding steps in the EASR will consider the significance of the environmental effects of the project on the environment; of the natural hazards on the project; of project malfunctions and accidents; and of other projects and activities that could cause cumulative effects.

The EASR will consider all of these effects in providing an opinion on whether the project, taking into account the mitigation measures, is likely to cause significant adverse environmental effects. The RA(s) will make the final decision on significance.

9.8 Stakeholder Consultation

Drawing from information in the supporting technical documentation, the EASR will include a summary of the consultations undertaken with the potentially affected stakeholders as part of the coordinated EA process.

The EASR will contain a summary of the comments received during this EA process. The EASR will briefly indicate how issues identified have been considered in the completion of the assessment, or where relevant, how they may be addressed in any subsequent licensing and compliance process.

Based on the authority provided in subsection 18(3) of the CEAA, the RA(s) intend to provide the public an opportunity to examine and comment on the screening report. It is anticipated that once the EASR is considered satisfactory by the federal review team, the draft report will be made available for public review and comment. The federal review team would provide the public comments to MTO and the consultant team, and may request that additional revisions be made to the EASR based on the public input.

A consultation plan will be developed in consultation with the Agency and the MOE to outline in more detail how the public review process will be coordinated with the provincial EA process.

9.9 Follow-up Program

The need for a follow-up program will be considered by the RA(s) in consultation with the federal review team during the conduct of the EASR. The purpose of the follow-up program is to assist in determining if the environmental and cumulative effects of the project are as predicted in the EASR. It is also to confirm whether the impact mitigation measures are effective, and to determine if any new mitigation strategies may be required. The design of the program will be appropriate to the scale of the project and the issues addressed in the EASR.

9.10 Conclusions and Recommendations for Decision

The EASR will present a conclusion by the RA(s) as to whether the project is likely to cause significant adverse environmental effects, taking into account the appropriate mitigation measures. Staff from each of the RA(s) will make recommendations on taking decisions on the EA and project-related public concerns, consistent with section 20 of the CEAA. The RA(s) will make their decision on the EASR and will present that decision within the final EASR report. If the RA(s) concludes that the project is not likely to cause significant adverse environmental effects, taking into account the appropriate mitigation measures, it may proceed with approvals in relation to the project.

10.0 STEPS IN THE ENVIRONMENTAL ASSESSMENT PROCESS

The following points indicate the key steps likely to be followed by the federal review team during the EA process:

- Determination of the application of CEAA to the project, including application of the Federal Coordination Regulations; establishment of Public Registry;
- Preparation of working draft of EA Guidelines; distribution of draft EA Guidelines to proponent and federal and provincial authorities, and to the public; receipt of comments from federal and provincial authorities, and the public;
- Review and disposition of comments received; revision of draft EA Guidelines;
- Issuance of EA Guidelines and delegation of EASR to the proponent;
- Receipt of draft EASR from the proponent;

B O R D E R T R A N S P O R T A T I O N P A R T N E R S H I P

- Distribution of draft EASR to review team; revision by proponent, as appropriate, of EASR;
- Public review and comment on draft EASR; federal review and disposition of public comments; completion of EASR; and
- RA’s Notice of Decision on EASR.

11.0 CONTACTS FOR THE ENVIRONMENTAL ASSESSMENT

Anyone wishing to obtain additional information or provide comments on any aspect of the EA being conducted for the DRIC Project may contact the following:

<p>Ms. Cathy Hainsworth Senior Program Officer Canadian Environmental Assessment Agency 55 St. Clair Avenue East 9th Floor, Room 907 Toronto, ON M4T 1M2</p> <p>Phone: 416-952-6063 Fax: 416-952-1573 E-mail: cathy.hainsworth@ceaa-acee.gc.ca</p>	<p>Ms. Kaarina Stiff Environmental Assessment Project Manager Transport Canada 330 Sparks Street Place de Ville, Tower C Ottawa, ON K1A 0N5</p> <p>Phone: 613-990-2861 Fax: 613-990-9639 E-mail: stiffk@tc.gc.ca</p>
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12.0 REFERENCES

The EASR will include a list of references, as required.

Table 1: Scope of the Factors to be Assessed

Factor	Issues to be Examined
Air Quality and Climate	<ul style="list-style-type: none"> • Description of ambient air quality in the study area, consistent with the approach outlined in the Air Quality Work Plan for the preferred alternative • Identification of residences and sensitive receptors potentially impacted by air emissions and fugitive dust from the project • Identification of potential effects associated with construction, and any required demolition activity, such as exhaust emissions from operation of heavy equipment and dust generation • Identification of potential effects associated with operations, such as emissions associated with increased traffic in the proposed project corridor, consistent with the approach outlined in the Air Quality Work Plan • Contribution to regional emissions for the local air shed • Comparison of the predicted effects on residences and sensitive receptors with the MOE Ambient Air Quality Criteria and National Ambient Air Quality Objectives and Canada Wide Standards • Identification of related impacts to human health and sensitive ecosystems • The assessment will address key pollutants and precursors (CO, NO_x, SO₂, PM₁₀, PM_{2.5} and VOCs), air toxics (benzene, acetaldehyde, formaldehyde, 1,3-butadiene, acrolein, and PAHs) and greenhouse gases (CO₂, N₂O and CH₄) • Description of proposed mitigation measures for the predicted effects • Opinion on the significance of residual effects and ecological consequences
Surface Water	<ul style="list-style-type: none"> • Description of existing drainage in the study area, including name, location and characteristics; specific attention should be paid to: Detroit River Area of Concern (AOC) (notably locations and characteristics of any contaminated bed sediments within the proposed crossing study area, and objectives established under the Remedial Action Plan for restoring beneficial uses in AOC), the Grand Marais Drain, Turkey Creek • Identification of potential water quantity and quality effects during construction and operations (e.g., erosion, sedimentation, including re-suspension of bed sediments, maintenance chemicals, etc.), including those from spills • If bridge piers in the Detroit River are proposed, potential effects of any in-water structures (e.g., piers, temporary cofferdams, etc) on upstream

Factor	Issues to be Examined
	<p>water levels and flows must be determined for a range of flow conditions³ by detailed hydro-technical modelling, in consultation with Environment Canada and Foreign Affairs Canada</p> <ul style="list-style-type: none"> • Description of the proposed stormwater management plan and other runoff management and treatment/mitigation measures • Comparison of predicted effects of project drainage (based on conformance with provincial stormwater management requirements and best practices for winter de-icing⁴.) to federal and provincial water quality and sediment quality guidelines for protection of aquatic habitat and potable water resources, including the Guidelines for Canadian Drinking Water Quality and CCME Environmental Quality Guidelines • Identification of any drinking water treatment facilities in the study area • Opinion on the significance of residual effects and ecological consequences
Groundwater	<ul style="list-style-type: none"> • Description of groundwater resources in the study area, including water quality, depth of water table and direction of flow, infiltration/recharge and seepage/upwelling zones • Identification of proximity of drinking water wells • Identification of predicted impacts on groundwater resources (quality and quantity), including those from stormwater runoff and accidental spills during all projects phases • Comparison of predicted effects to applicable federal and provincial water quality guidelines • Identification of predicted alterations to base flow, and associated impacts • Description of proposed mitigation measures • Opinion on the significance of residual effects and ecological consequences
Surface and Subsurface Geology and Soils	<ul style="list-style-type: none"> • Description of surface geology and soils in the study area • Description of subsurface geology in the study area, including relevant information from historic salt mining activity in the vicinity of the project footprint • Identification of predicted effects on surface and subsurface geology from the project, including potential for contamination by roadway drainage and accidental spills during all project phases • Identification of predicted effects on the project from subsurface geology, including any potential of accidents or malfunctions • Description of proposed mitigation measures

³ For example, extreme high and low flows and seasonal median flows

⁴ The *Synthesis of Best Practices for Road Salt Management* (Transportation Association of Canada)
<http://www.tac-atc.ca/english/pdf/roadandbridge.PDF> and,
<http://www.tac-atc.ca/english/pdf/drainage.PDF>

Factor	Issues to be Examined
	<ul style="list-style-type: none"> Opinion on the significance of residual effects and ecological consequences
Vegetation, Vegetation Communities and Wetlands	<ul style="list-style-type: none"> Description of vegetation and wetlands in the study area, consistent with the approach outlined in the Natural Heritage Work Plan Identification of predicted impacts of the project during construction and operations, including vegetation removal and any relevant operational considerations Identification of disturbance to vegetation from edge creation (sunscauld, wind-throw, light penetration, rain shadow, etc.) Identification of disturbance to vegetation from drainage modifications, including changes in groundwater levels Description of proposed mitigation measures Opinion on the significance of residual effects and ecological consequences
Fish and Fish Habitat	<ul style="list-style-type: none"> Description of presence of aquatic life (including fish and mussels) and their habitat in the study area, consistent with the approach outlined in the Natural Heritage Work Plan Identify impacts of construction and operations on fish and fish habitat, specifically spawning, migration, and food availability Description of proposed mitigation and/or compensation, with reference to the DFO principle of “No Net Loss” of fish habitat from the policy for the Management of Fish Habitat Opinion on the significance of residual effects and ecological consequences Identify waterways affected by works that may be possible fish migration routes.
Wildlife, Wildlife Habitat and Migratory Birds	<ul style="list-style-type: none"> Description of migratory birds and wildlife species frequenting the project area and their habitats (notably any significant habitats potentially impacted by the project), consistent with the approach outlined in the Natural Heritage Work Plan including species that may only use the study area on a seasonal basis Description of any wildlife habitats and other areas crossed by the project that are utilized as wildlife corridors providing linkages to significant habitats Identification of predicated effects of the project, during construction and operations, notably on significant habitats such as the Ojibway Black Oak Woods ANSI, Ojibway Provincial Nature Reserve and Prairie Remnants ANSI, Spring Garden, Fighting Island Wetland, and Detroit River Marshes Description of proposed mitigation measures, including measures that will be put in place to ensure compliance with the <i>Migratory Birds Convention Act</i>, <i>Species at Risk Act</i>, and any regulations under these statutes

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Factor	Issues to be Examined
	<ul style="list-style-type: none"> Opinion on the significance of residual effects and ecological consequences
Species at Risk	<ul style="list-style-type: none"> Identification of the presence of species of concern (local, regional, national), including those species listed under the <i>Species at Risk Act</i> (SARA) or the presence of suitable habitat, their residences or critical habitat, consistent with the approach outlined in the Natural Heritage Work Plan Consideration of the requirements of SARA Identification on whether or not the project activities are likely to have an adverse environmental effect on any species of concern Description of proposed mitigation and monitoring measures if any species of concern are likely to be affected Opinion on the significance of residual effects and ecological consequences
Noise and Vibration	<ul style="list-style-type: none"> Description of the community and neighbourhood characteristics, including land uses, to facilitate an understanding of the project area Description of ambient noise levels in the study area, consistent with the approach outlined in the Acoustics and Vibration Work Plan for the technically preferred alternative Identification of noise sensitive receptors, including schools, daycares, hospitals and seniors' residences Identification of predicted noise and vibration impacts resulting from the use of heavy construction equipment during construction, including the predicted worst-case 1-hour sound level Identification of predicted noise and vibration levels during operations Comparison of predicted noise and vibration levels to relevant provincial and federal guidelines Description of proposed mitigation measures Opinion on the significance of residual effects
Socio-economic	<ul style="list-style-type: none"> Description of heritage and archaeological resources in the study area, consistent with the Cultural Heritage Work Plan and the Archaeological Work Plan for the preferred alternative Identification of any direct socio-economic effects that may result from a project impact on the environment, including potential impacts on cultural and archaeological, heritage, and aboriginal use of traditional lands/resources Identification of predicted effects on navigability Description of proposed mitigation measures Opinion on the significance of residual effects
Contaminated Sites and Waste Management	<ul style="list-style-type: none"> Description of waste materials (e.g., construction waste, garbage, sewage and hazardous waste) that will likely be generated during construction and operations phases of the project, consistent with the approach outlined Waste and Waste Management Work Plan

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Factor	Issues to be Examined
	<ul style="list-style-type: none"> • Identification of procedures for identification of contaminated and/or hazardous waste materials and for transporting, handling and disposal of waste materials, including contaminated or hazardous waste • Identification of effects the project may have, including those from contaminated sites and any proposed remediation options, notably options requiring in-situ treatment or removal and transportation of contaminated material • Identification of the containment, disposal or remediation method (including environmental effect) for contaminated soils/materials; or a description of the options that will be considered and the decision framework that will be used to select the most appropriate method • Identify whether any hazardous waste are proposed to be transported across the international border • Description of the proposed mitigation/remediation measures • Opinion on the significance of residual effects and ecological consequences
<p>Current use of lands and resources for traditional purposes by Aboriginal peoples</p>	<ul style="list-style-type: none"> • Identification of First Nations land uses and interests, in consultation with the Walpole Island First Nations • Identification of any indirect effects the project may cause on the current use of land for traditional purposes, or on First Nations cultural, archaeological or heritage resources • Description of proposed mitigation measures • Opinion on the significance of residual effects

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