

Detroit River International Crossing



Environmental Assessment Terms of Reference

SUPPORTING DOCUMENTATION

May 2004

Detroit River International Crossing
Environmental Assessment Terms of Reference
Supporting Documentation

- A) Record of Consultation During Preparation of the TOR
- B) Supporting Documentation
 - 1) Canada-U.S.-Ontario-Michigan Border Transportation Partnership Transportation Problems and Opportunities Report (January 2004)
 - 2) The FHWA/NEPA Planning and Approval Process
 - 3) Preliminary Description of Existing Environment and Potential Effects
 - 4) Proposed Factors to Assess Feasibility of the Opportunity Corridors
 - 5) Environmental Components to be Considered During the Generation of Alternatives
 - 6) Criteria for Evaluating Illustrative and Practical Alternatives
 - 7) Typical Elements of Concept Design
 - 8) Federal / Provincial EA Coordination Process
 - 9) Activities Following Approval of the EA

Supporting Documentation

5) ENVIRONMENTAL COMPONENTS TO BE CONSIDERED DURING THE GENERATION OF ALTERNATIVES

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FACTOR	ENVIRONMENTAL COMPONENT	RATIONALE	DATA SOURCE
Social Environment	Areas of Residential Development	<p>CAN - Ontario's Provincial Policy Statement does not preclude transportation facilities in developed areas. However, local traffic, safety/operations, property, increased noise and dust issues may constrain transportation facilities.</p> <p>U.S. - Local zoning ordinances and any type of existing or proposed development plans (city, township, village, etc.) will need to be reviewed and adhered to regarding any changes in existing and proposed land use, air and noise levels, and existing and proposed developments. Areas of residential development may constrain, but do not necessarily preclude a transportation facility.</p>	<ul style="list-style-type: none"> ▪ 1:50 000 topographic maps ▪ Aerial photography ▪ Information System (NRVIS) ▪ Municipal land use/development information ▪ MPAC records ▪ Public consultation
	Areas of Commercial / Institutional Development	<p>CAN - Ontario's Provincial Policy Statement does not preclude transportation facilities in developed areas. However, local traffic, safety/operations, property, increased noise and dust issues may constrain transportation facilities.</p> <p>U.S. - Local zoning ordinances and any type of existing or proposed development plans (city, township, village, etc.) will need to be reviewed and adhered to regarding any changes in existing and proposed land use, air and noise levels, and existing and proposed developments. Areas of commercial development may constrain, but do not necessarily preclude a transportation facility.</p>	<ul style="list-style-type: none"> ▪ 1:50 000 topographic maps ▪ Aerial photography ▪ Information System (NRVIS) ▪ Municipal land use/development information ▪ MPAC records ▪ Public consultation
	Landfills and Hazardous Waste Sites	<p>CAN - Ontario's Environmental Protection Act requires approval of the Minister of the Environment to utilize landfills and hazardous waste sites for another purpose. Such sites seriously constrain transportation facilities because of the decommissioning cost and ongoing potential for liability.</p> <p>U.S. - Parts 111, 115, 201, and 213 of the Michigan Natural Resources and Environmental Protection Act; the federal Resource Conservation and Recovery Act (RCRA); and the federal Comprehensive Environmental Responsibility, Compensation, and Liability Act (CERCLA) limit the uses of landfills and sites of environmental contamination, and impose severe penalties and liabilities for infringement. "Superfund" sites preclude transportation facilities.</p>	<ul style="list-style-type: none"> ▪ Historical Plans ▪ MOE Waste Generator Database ▪ MOE PCB Storage Site Database ▪ MOE Waste Disposal Site Inventory ▪ Technical Standards & Safety Authority ▪ Aerial Photographs ▪ Municipal Directories ▪ Municipal Assessment Maps ▪ OBM and NTS Mapping ▪ Soils, Hydrogeological and Geological Maps ▪ Libraries ▪ Historical Archives ▪ Land Registry Offices ▪ Municipal Offices
Cultural Environment	Historical, Archaeological and Cultural Sites	<p>CAN - Ontario's Provincial Policy Statement advocates the conservation of significant built heritage resources and cultural sites. Significant sites are those which are important in terms of amount, content, representation or effect. Such sites will generally preclude transportation facilities.</p> <ul style="list-style-type: none"> • Ontario's Provincial Policy Statement does not preclude transportation facilities on lands containing archaeological resources if said resources have been conserved by removal and documentation, or preservation on site. Where significant archaeological resources must be preserved on site, transportation facilities are not precluded provided the heritage integrity of the site is maintained. Significant sites are those which are important in terms of amount, content, representation or effect. <p>U.S. - Identification of historic properties protected under the National Historic Preservation Act (NHPA) is co-ordinated by the State Historic Preservation Officer (SHPO), who directs surveys and inventories of historic properties and nominates properties to the National Register of Historic Places.</p> <ul style="list-style-type: none"> • Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their proposed actions on historic properties and to seek comments from the Advisory Council on Historic Preservation, an independent federal reviewing agency created by the NHPA, regarding proposed actions. • Section 4(f) of the 1966 Department of Transportation Act specifies that any land from an historic site of national, state, or local significance (as determined by the officials having jurisdiction) may not be used for transportation projects unless there is no feasible and prudent alternative to the use of such land, and the proposed project includes all possible planning to minimize harm. Section 4(f) sites generally preclude transportation facilities. 	<ul style="list-style-type: none"> ▪ Provincial Policy Statement ▪ Data gathering exercise to identify any archaeological sites of extreme significance. ▪ Consultation with Ministry of Culture ▪ Ontario Archaeological Sites Database ▪ Michigan State Historic Preservation Office ▪ Archaeological/heritage studies and reports ▪ Other published and unpublished archaeological literature ▪ First Nation groups ▪ Historical mapping and aerial photographs, cemetery lists, municipal, provincial and federal inventories, listings, plaques, easements and designations of National Historic Sites and under the Ontario Heritage Act. ▪ Input from other factor areas ▪ Consultation with municipal and regional heritage planning staff or designates, Local Architectural Advisory Committees (LACACS), historical societies and other heritage groups as necessary ▪ Field survey

5) ENVIRONMENTAL COMPONENTS TO BE CONSIDERED DURING THE GENERATION OF ALTERNATIVES (CON'T)

FACTOR	ENVIRONMENTAL COMPONENT	RATIONALE	DATA SOURCE
Cultural Environment Con't	National, State, and Provincial Parks and Conservation / Recreational Areas	<p>CAN - Ontario's Provincial Policy Statement does not address parks and conservation authorities. However, these areas are often associated with other features covered by the Policy Statement. Transportation facilities are not precluded within such areas if it can be demonstrated that there will be no negative impacts to the natural features or ecological functions for which the area is identified. However these areas may constrain transportation facilities.</p> <ul style="list-style-type: none"> • U.S. - Section 4(f) of the 1966 Department of Transportation Act specifies that publicly owned land from a park or recreation area may not be used for transportation projects unless there is no feasible and prudent alternative to the use of such land, and the proposed project includes all possible planning to minimize harm. Section 4(f) lands generally preclude transportation facilities. <p>Section 6(f) of the Land and Water Conservation Fund (L&WCF) Act, as amended, requires that property acquired or developed with L&WCF assistance shall not be converted to other than public outdoor recreation uses without the approval of the Secretary of the U.S. Department of the Interior. It directs the Department of the Interior (National Park Service) to ensure that replacement lands of equal value, location, and usefulness are provided as conditions to approval of land conversions. Section 6(f) lands may constrain, but do not necessarily preclude a transportation facility.</p>	<ul style="list-style-type: none"> ▪ Identified by municipality, CA, OMNR, Municipalities, Interest Groups or other background sources ▪ Bird Studies Canada ▪ SWHTG ▪ Provincial Policy Statement and associated MNR Natural Heritage Training Manual ▪ Michigan Natural Resources Inventory ▪ NHIC ▪ Detroit River Area of Concern Remedial Action Plan ▪ P/NF Study ▪ Ontario Parks ▪ USGS topographical maps
Natural Environment	Groundwater Quality and Quantity	<p>CAN - Ontario's Provincial Policy Statement has the objective of protecting or enhancing groundwater quality and quantity and the function of sensitive groundwater recharge/discharge areas and aquifers. Transportation facilities have the potential to impact groundwater resources through removal of recharge areas and contaminated runoffs. However, since groundwater can be protected through proper design measures areas of soil susceptible to infiltration and contamination may constrain, but do not necessarily preclude a transportation facility.</p> <p>U.S. - Part 31 of the Michigan Natural Resources and Environmental Protection Act, the Michigan Safe Drinking Water Act, and the federal Clean Water Act require the protection of groundwater and of potable water sources and aquifers. The presence of groundwater, potable water sources and/or aquifers may constrain, but does not necessarily preclude a transportation facility.</p>	<ul style="list-style-type: none"> ▪ MOE mapping of susceptibility to groundwater contamination ▪ P/NF Study ▪ Watershed / subwatershed studies ▪ Provincial Policy Statement and associated OMNR Natural Heritage Training Manual ▪ MOE well record data
	Surface Water Quality and Quantity, Fisheries & Aquatic Habitat	<p>CAN - Ontario's Provincial Policy Statement has the objective of protecting or enhancing surface water quality, including the function of headwaters. Since development is permitted in significant valley lands provided it can be demonstrated that there will be no negative impacts to the natural features or ecological functions for which the area is identified, valley lands may constrain, but do not necessarily preclude transportation facilities. Transportation facilities should not be placed along watercourses or along valley lands. The Federal Fisheries Act prohibits the harmful alteration, disruption or destruction of fish habitat, the introduction of deleterious substances to fish habitat and the blockage of fish passage.</p> <p>U.S. - Federal: Issuance of permits for the discharge of dredged and fill material into navigable waters of the United States pursuant to Section 404 of the federal Clean Water Act. The Water Quality Act of 1987 also requires permits for certain types of activities that may involve the runoff of contaminated storm water into surface waters. State: Part 301 of the Natural Resources and Environmental Protection Act, P.A. 451 of 1994, requires the issuance of a permit from the Michigan Department of Environmental Quality for certain uses or developments in regulated surface waters. Also, management of storm water runoff during operation of the facility may be a condition of the Part 301 permit. Part 31 of the Natural Resources and Environmental Protection Act, P.A. 451 of 1994, requires notification to the Michigan Department of Environmental Quality for any construction activities that involves earth disturbance. The presence of surface water may constrain, but does not necessarily preclude a transportation facility.</p>	<ul style="list-style-type: none"> ▪ 1:50 000 or 1:25 000 topographic maps ▪ 1:10 000 base maps ▪ OMNR Natural Resource Values Information System (NRVIS) ▪ Conservation Authorities ▪ Watershed Management Plans ▪ Interest Groups ▪ Public consultation ▪ NHIC ▪ Provincial Policy Statement and associated MNR Natural Heritage Training Manual ▪ Great Lakes Commission ▪ U.S. EPA ▪ Greater Detroit American Heritage River Initiative ▪ MDNR Director's FO-210.01, 2002 Inland Trout & Salmon Guide
	Agricultural Lands	<p>CAN - Ontario's Provincial Policy Statement has the objective of protecting prime agricultural areas. The policy presents a hierarchy of significance with specialty crop areas being most significant, followed by Class 1, 2 and 3 agricultural land in that order. Since tender fruit lands require a unique combination of soil and climate, such areas generally preclude transportation facilities. Specialty crop areas may require special soil characteristics and therefore may constrain transportation facilities. The significance of Class 1,2,3 soils is related to their abundance in the analysis area. Where Class 1,2,3 soils are abundant, this indicator would not necessarily constrain a transportation facility.</p> <p>U.S. - The project may need review under the Federal Farmland Protection Policy Act, which addresses impacts on prime, unique, state-wide important, and locally important farmlands. This involves co-ordination and review by the USDA/ Natural Resource Conservation Service. May also need review under P.A. 233, more commonly known as P.A. 116 of 1974, for potential impacts on properties enrolled under the act. The presence of unique/significant agricultural lands may constrain, but does not necessarily preclude a transportation facility.</p>	<ul style="list-style-type: none"> ▪ Official land use plans ▪ OMAFRA ▪ Regional and local agricultural federations ▪ Soil reports

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FACTOR	ENVIRONMENTAL COMPONENT	RATIONALE	DATA SOURCE								
Natural Environment Con't	Wetlands	<p>CAN - Ontario's Provincial Policy Statement prohibits development and site alteration in significant wetlands south and east of the Canadian Shield. Such areas generally preclude transportation facilities.</p> <p>U.S. - Federal: Issuance of permits for the discharge of dredged and fill material into navigable waters of the United States pursuant to Section 404 of the Federal Clean Water Act, Executive Order 11990 May 24, 1977, and 42 F.R. 26961, direct federal agencies to avoid to the extent possible the long or short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Wetlands conservation provisions of the Food Security Act minimizes the impact of Federal wetlands programs on affected landowners to the fullest extent possible consistent with the important goal of protecting wetlands. State: Part 303 of the Natural Resources and Environmental Protection Act, P.A. 451 of 1994, requires the issuance of a permit from the Michigan Department of Environmental Quality for certain uses or developments in wetlands. Transportation facilities are generally precluded in bogs and fens; other wetland areas may constrain, but do not necessarily preclude a transportation facility.</p>	<ul style="list-style-type: none"> ▪ MNR ▪ CA ▪ P/NF Study ▪ NHIC ▪ 1:10 000 MNR wetland mapping ▪ Provincial Policy Statement and associated MNR Natural Heritage Training Manual ▪ USGS topographical maps ▪ U.S. National Wetland Inventory 								
	Areas of Natural and Scientific Interest (ANSI's)	<p>CAN - Ontario's Provincial Policy Statement does not preclude transportation facilities within ANSI's if it can be demonstrated that there will be no negative impacts to the natural features or ecological functions for which the area is identified. However these areas may constrain transportation facilities.</p> <p>U.S. - The Michigan Natural Features Inventory (MNFI) conducts field surveys to locate and identify threatened and endangered species, natural plant communities, and other natural features throughout the state, and the MNFI maintains a database of all relevant species, community, and feature locations. The MNFI provides data summaries and analysis in support of environmental reviews, and provides biological expertise to the Michigan Department of Natural Resources (DNR) the Michigan Department of Environmental Quality (DEQ), and other agencies and organizations. This program is an essential part of meeting the DNR's legislated responsibilities for threatened and endangered species protection.</p>	<ul style="list-style-type: none"> ▪ P/NF Study ▪ NHIC ▪ MNR Land Use Guidelines ▪ Conservation Authority Plans and Inventories ▪ Municipal Plans ▪ SWHTG ▪ Provincial Policy Statement and associated MNR Natural Heritage Training Manual ▪ Watershed and subwatershed studies ▪ Act 451, Michigan Public Acts of 1994 ▪ The Michigan Natural Resources and Environmental Protection Act ▪ Great Lakes Shorelands Section of the MDEQ 								
	Environmentally Sensitive Areas (ESA's)	<p>CAN - Ontario's Provincial Policy Statement does not address ESA's. However, ESA's are often associated with other features covered by the Policy Statement. Transportation facilities are not precluded within ESA's if it can be demonstrated that there will be no negative impacts to the natural features or ecological functions for which the area is identified. However these areas may constrain transportation facilities.</p> <p>U.S. - The CIWPIS is used to notify organizations of proposed construction activities in geographical areas having "Special Interest Areas" in which various organizations may have possible concerns. The project will also need review under the Coastal Zone Management Act's federal consistency regulations. The presence of "Special Interest Areas" may constrain, but does not necessarily preclude a transportation facility.</p>	<ul style="list-style-type: none"> ▪ P/NF Study ▪ NHIC ▪ MNR Land Use Guidelines ▪ Conservation Authority Plans and Inventories ▪ Municipal Plans ▪ SWHTG ▪ Provincial Policy Statement and associated MNR Natural Heritage Training Manual ▪ Watershed and subwatershed studies ▪ Act 451, Michigan Public Acts of 1994 ▪ The Michigan Natural Resources and Environmental Protection Act ▪ Great Lakes Shorelands Section of the MDEQ 								
	Woodlands	<p>CAN - Ontario's Provincial Policy Statement does not preclude transportation facilities within woodlands south and east of the Canadian Shield if it can be demonstrated that there will be no negative impact to the natural features or ecological functions for which the area is identified. However these areas may constrain transportation facilities. The size of woodland that is considered significant is as follows:</p> <table border="0" data-bbox="761 1501 1507 1663"> <tr> <td style="text-align: center;"><u>Percentage of Woodland Coverage</u></td> <td style="text-align: center;"><u>Size of Woodland Considered Significant</u></td> </tr> <tr> <td style="text-align: center;"><5%</td> <td style="text-align: center;">> 2 hectares</td> </tr> <tr> <td style="text-align: center;">5-15 %</td> <td style="text-align: center;">> 4 hectares</td> </tr> <tr> <td style="text-align: center;">15-30%</td> <td style="text-align: center;">> 40 hectares</td> </tr> </table> <p>U.S. - The Michigan Natural Features Inventory (MNFI) conducts field surveys to locate and identify threatened and endangered species, natural plant communities, and other natural features throughout the state, and the MNFI maintains a database of all relevant species, community and feature locations. The MNFI provides data summaries and analysis in support of environmental reviews, and provides biological expertise to the Michigan Department of Natural Resources (DNR) the Michigan Department of Environmental Quality (DEQ), and other agencies and organizations. This program is an essential part of meeting the DNR's legislated responsibilities for threatened and endangered species protection (see #9 below – Endangered Species).</p>	<u>Percentage of Woodland Coverage</u>	<u>Size of Woodland Considered Significant</u>	<5%	> 2 hectares	5-15 %	> 4 hectares	15-30%	> 40 hectares	<ul style="list-style-type: none"> ▪ P/NF Study ▪ NHIC ▪ MNR Land Use Guidelines ▪ Conservation Authority Plans ▪ SWHTG ▪ Provincial Policy Statement and associated OMNR Natural Heritage Training Manual ▪ USGS topographical maps
<u>Percentage of Woodland Coverage</u>	<u>Size of Woodland Considered Significant</u>										
<5%	> 2 hectares										
5-15 %	> 4 hectares										
15-30%	> 40 hectares										

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FACTOR	ENVIRONMENTAL COMPONENT	RATIONALE	DATA SOURCE
Natural Environment Con't	Wildlife Preserves	<p>CAN - Ontario's Provincial Policy Statement does not address wildlife preserves. However, these areas are often associated with other features covered by the Policy Statement. Transportation facilities are not precluded within such areas if it can be demonstrated that there will be no negative impacts to the natural features or ecological functions for which the area is identified. However these areas may constrain transportation facilities.</p> <ul style="list-style-type: none"> • U.S. - Section 4(f) of the 1966 Department of Transportation Act specifies that wildlife/waterfowl refuge of national, state or local significance may not be used for transportation projects unless there is no feasible and prudent alternative to the use of such land, and the proposed project includes all possible planning to minimize harm. Section 4(f) lands generally preclude transportation facilities. 	<ul style="list-style-type: none"> ▪ Identified by municipality, CA, OMNR, Municipalities, Interest Groups or other background sources ▪ Bird Studies Canada ▪ SWHTG ▪ Provincial Policy Statement and associated MNR Natural Heritage Training Manual ▪ Michigan Natural Resources Inventory ▪ NHIC ▪ Detroit River Area of Concern Remedial Action Plan ▪ P/NF Study ▪ Ontario Parks ▪ USGS topographical maps
	Endangered Species/ Species at Risk	<p>CAN - Ontario's Provincial Policy Statement precludes transportation facilities in significant portions of an endangered species habitat. Significant portions of habitat are those areas that are ecologically important in terms of features, functions, representation or amount. Such areas will generally preclude transportation facilities</p> <p>U.S. - Federal: The Endangered Species Act of 1973 (P.L. 93-205) mandates all federal departments and agencies to conserve endangered species and to utilize their authorities if furthering the purpose of the Endangered Species Act. State: Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act 451 of the Public Acts of 1994, being sections 324.36501 to 324.36507 provides for the conservation, management, enhancement and protection of fish, plant life, and wildlife species endangered or threatened with extinction; provides for enforcement authority and prescribe penalties for violations of the act. The presence of endangered species generally precludes transportation facilities.</p>	<ul style="list-style-type: none"> ▪ NHIC ▪ OMNR / Significant Wildlife Habitat Technical Guide (SWHTG) ▪ CA ▪ Species at Risk database ▪ Species at Risk Act (SAR) ▪ Species at Risk Recovery Plans and Management Guidelines (where available) ▪ Provincial Policy Statement and associated MNR Natural Heritage Training Manual ▪ Canadian Canada Big Picture Mapping ▪ Michigan Department of Natural Resources ▪ U.S. Fish and Wildlife Service ▪ Michigan Natural Resources Inventory