

Detroit River International Crossing



Environmental Assessment
Terms of Reference

SUPPORTING DOCUMENTATION

May 2004

Detroit River International Crossing
Environmental Assessment Terms of Reference
Supporting Documentation

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 - 2) The FHWA/NEPA Planning and Approval Process
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Supporting Documentation

3) PRELIMINARY DESCRIPTION OF EXISTING ENVIRONMENT AND POTENTIAL EFFECTS

3) PRELIMINARY DESCRIPTION OF EXISTING ENVIRONMENT AND POTENTIAL EFFECTS

The Canadian side of the Detroit River area consists primarily of the urban area of the City of Windsor, the neighbouring Towns of LaSalle, Tecumseh and Amherstburg, and a surrounding fringe of rural land uses. It is characterized by both heavily urbanized and intensive agricultural land uses that are interspersed with a patchwork of remnant natural heritage features, including wetlands, prairies, and woodlots. The United States side of the Detroit River is primarily an intensively developed urban area consisting of intermixed residential, commercial, and industrial areas. There are public parks, playgrounds, recreational areas, public works, schools, cemeteries, and military properties scattered throughout the area.

The Canadian side encompasses the City of Windsor, the Town of LaSalle, the Town of Tecumseh and the Town of Amherstburg. Combined, the area has a census population of over 300,000. The municipalities on the United States side of the river, includes the cities of Detroit, Wyandotte, Ecorse, Grosse Pointe Park, Grosse Pointe, Lincoln Park, Allen Park, Southgate, Dearborn, Melvindale, River Rouge, Gibraltar, Trenton, Riverview, Taylor, Dearborn Heights, and Grosse Pointe Farms and the Townships of Brownstown and Redford. The cities of Hamtramck and Highland Park are completely surrounded by the City of Detroit. The Detroit River area on the U.S. side is encompassed by Wayne County, the population of which is approximately 2,000,000. Of this, approximately 1,000,000 are in the City of Detroit. In general, the land use is largely commercial with many large industries located along the riverfront and near the Detroit Central Business District. There are now efforts to promote residential redevelopment along the river, especially in Detroit, where recreational and residential land use on the waterfront is currently sparse.

The nature of the Detroit River area is that of a developed urban area consisting of intermixed residential, commercial, and industrial areas. Public parks, playgrounds, recreation areas, public works, schools, cemeteries, and military properties are scattered throughout the area. As well, outside of the urban areas of Windsor, LaSalle, Tecumseh and Amherstburg, a sizable portion of the land use is agricultural.

From a natural environment perspective, in its original state, the project area was a complex of wetlands, woodlands, rivers and streams that provided abundant wildlife habitat. European settlement commenced approximately 300 years ago and, as it progressed, the existing natural features were extensively modified or eliminated. Woodlands were cleared for residential, agricultural, or industrial use and wetlands were filled for the same reasons or drained in attempts to control malaria. As urbanization progressed, the quality of some streams and rivers significantly declined. In the last 30 years a general recognition of the declining quality of these features has become widespread and various programs to stop and reverse the decline have been introduced at all levels of the governments of, and even between, Canada and the United States. There is steadily increasing public knowledge, interest, support, and participation in these programs.

With respect to key features, the Detroit River is the first river to be designated a bi-national Heritage River. The governments of Canada and the U.S. are actively cooperating to develop management plans to preserve and enhance the remaining natural features, as well as the cultural and recreational values, of the entire River (i.e. The Remedial Action Plan for the Detroit River Area of Concern).

Canada and the U.S. have also initiated the establishment of the Detroit River International Wildlife Refuge. When fully established, the Refuge will include the marshes, coastal wetlands, islands, shoals, and riverfront lands from Mud Island on its north extent to the southern border of Sterling State Park in Monroe County at its southern extent. This will be the first international wildlife refuge and its charge is quite broad: to preserve and restore the natural features of the Detroit River to protect the wildlife habitat.

The potential effects of the project are described in the following table:

PRELIMINARY DESCRIPTION OF POTENTIAL EFFECTS

Environmental Feature Potentially Affected	Definition		Rationale & Interpretation
1) Groundwater Quality and Quantity	CAN	<ul style="list-style-type: none"> Soils that are susceptible to infiltration & contamination 	<ul style="list-style-type: none"> 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.
	U.S.	<ul style="list-style-type: none"> Groundwater and drinking water supply sources 	<ul style="list-style-type: none"> 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.
2) Surface Water Quality and Quantity	CAN	<ul style="list-style-type: none"> Permanent watercourses and significant valley land 	<ul style="list-style-type: none"> 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.
	U.S.	<ul style="list-style-type: none"> U.S. Army Corps of Engineer's Jurisdiction Waters of the United States Topography Maps indicating Regulated Waters of the United States 	<ul style="list-style-type: none"> 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.
3) Agricultural Lands	CAN	<ul style="list-style-type: none"> Tender fruit lands Specialty crop lands Class 1,2,3 soils in areas generally lacking productive agricultural lands 	<ul style="list-style-type: none"> 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.
	U.S.	<ul style="list-style-type: none"> Prime/unique farmlands P.A. 116 properties 	<ul style="list-style-type: none"> 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.
4) Wetlands	CAN	<ul style="list-style-type: none"> Provincially significant wetlands south and east of the Canadian Shield 	<ul style="list-style-type: none"> 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.
	U.S.	<ul style="list-style-type: none"> 1987 Corps of Engineers Wetland Delineation Manual U.S. Fish and Wildlife Service's National Wetland Inventory Maps Natural Resources Conservation Service's Soil Surveys Michigan Resource Information (MIRIS) Land Cover and Uses Maps 	<ul style="list-style-type: none"> 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.
5) Areas of Natural and Scientific Interest (ANSI's)	CAN	<ul style="list-style-type: none"> ANSI's for life science and earth science as designated in Ministry of Natural Resources 	<ul style="list-style-type: none"> 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.
	U.S.	<ul style="list-style-type: none"> Michigan Natural Features Inventory 	<ul style="list-style-type: none"> 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).

PRELIMINARY DESCRIPTION OF POTENTIAL EFFECTS CON'T

Environmental Feature Potentially Affected	Definition		Rationale & Interpretation								
6) Environmentally Sensitive Areas (ESA's)	CAN	<ul style="list-style-type: none"> ESA's as designated in regional / local Official Plans 	<ul style="list-style-type: none"> 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. 								
	U.S.	<ul style="list-style-type: none"> Coastal Inland Waters Permit Information System (CIWPIS) Lands protected by the Coastal Zone Management Act 	<ul style="list-style-type: none"> 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. 								
7) Woodlands	CAN	<ul style="list-style-type: none"> Woodlands south and east of the Canadian Shield as identified by the Ministry of Natural Resources Significance of a woodland area is related to the woodlands coverage within the analysis area 	<ul style="list-style-type: none"> 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: <table border="1" data-bbox="1299 667 2023 822"> <thead> <tr> <th>Percentage of Woodland Coverage</th> <th>Size of Woodland Considered Significant</th> </tr> </thead> <tbody> <tr> <td><5%</td> <td>> 2 hectares</td> </tr> <tr> <td>5-15 %</td> <td>> 4 hectares</td> </tr> <tr> <td>15-30%</td> <td>> 40 hectares</td> </tr> </tbody> </table> 	Percentage of Woodland Coverage	Size of Woodland Considered Significant	<5%	> 2 hectares	5-15 %	> 4 hectares	15-30%	> 40 hectares
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U.S.	<ul style="list-style-type: none"> Michigan Natural Features Inventory 	<ul style="list-style-type: none"> 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). 									
8) National, State, and Provincial Park, Conservation Areas, Wildlife Preserves	CAN	<ul style="list-style-type: none"> As designated by the jurisdictional authority 	<ul style="list-style-type: none"> Ontario's Provincial Policy Statement does not address parks, conservation authorities and 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. 								
	U.S.	<ul style="list-style-type: none"> Any publicly owned parks, recreation areas, conservation areas, and wildlife/waterfowl refuges that may exist within the study area and be subject to a Section 4(f)/Section 6(f) Evaluation. 	<ul style="list-style-type: none"> Section 4(f) of the 1966 Department of Transportation Act specifies that publicly owned land from a park, recreation area, or 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. 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. 								
9) Endangered Species	CAN	<ul style="list-style-type: none"> "Significant portions" of habitat of endangered species as designated in the regulations under the Endangered Species Act 	<ul style="list-style-type: none"> 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 								
	U.S.	<ul style="list-style-type: none"> U.S Fish and Wildlife Service, Region 3 – County List of Federal Threatened, Endangered, and Proposed Species from Michigan Natural Features Inventory Database by Species B By County Michigan Department of Natural Resources, Wildlife Division – Michigan's Special Animals, Endangered, Threatened, Special Concern and Probably Extirpated, Compiled by the Michigan Natural Features Inventory Michigan Department of Natural Resources, Wildlife Division – Michigan's Special Plants, Endangered, Threatened, Special Concern and Probably Extirpated, March 1999, Compiled by the Michigan Natural Features Inventory 	<ul style="list-style-type: none"> 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. 								

PRELIMINARY DESCRIPTION OF POTENTIAL EFFECTS CON'T

Environmental Feature Potentially Affected	Definition		Rationale & Interpretation
10) Historical, Archaeological and Cultural Sites	CAN	<ul style="list-style-type: none"> As designated by the jurisdictional authority 	<ul style="list-style-type: none"> 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. 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.
	U.S.	<ul style="list-style-type: none"> Historical or archaeological sites that are considered to be eligible for listing on the National Register of Historic Places (NRHP) and/or on the State Register of Historic Places (SRHP), and are subject to a Section 4(f)/Section 6(f) Evaluation and Section 106 review 	<ul style="list-style-type: none"> 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. 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.
11) Landfills and Hazardous Waste Sites	CAN	<ul style="list-style-type: none"> Open and closed landfills and hazardous waste sites 	<ul style="list-style-type: none"> 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.
	U.S.	<ul style="list-style-type: none"> Open and closed landfills and sites of environmental contamination 	<ul style="list-style-type: none"> 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.
12) Areas of Residential Development	CAN	<ul style="list-style-type: none"> Existing developed areas, and approved urban expansions designated for primarily residential uses 	<ul style="list-style-type: none"> Ontario's Provincial Policy Statement does not preclude transportation facilities in such areas of development. However, local traffic, safety/operations, property, increased noise and dust issues may constrain transportation facilities.
	U.S.	<ul style="list-style-type: none"> Existing developed areas, local zoning ordinances, proposed residential development plans, and existing and future land use plans designated for primarily residential uses 	<ul style="list-style-type: none"> 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.
13) Areas of Commercial/ Institutional Development	CAN	<ul style="list-style-type: none"> Existing developed areas, and approved urban expansions designated for primarily commercial uses 	<ul style="list-style-type: none"> Ontario's Provincial Policy Statement does not preclude transportation facilities in such areas of development. However, local traffic, safety/operations, property, increased noise and dust issues may constrain transportation facilities.
	U.S.	<ul style="list-style-type: none"> Existing developed areas, local zoning ordinances, proposed commercial development plans, and existing and future land use plans designated for primarily commercial uses 	<ul style="list-style-type: none"> 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.

Notes:

1. Ontario's Provincial Policy Statement was issued under Section 3 of the Planning Act.
2. Canadian federal rationale and interpretation of environmental factors and indicators is similar to that of Ontario.