

1.0 INTRODUCTION

The Terry Fox Drive (TFD) Extension – Part B project involves the construction of 3.6 km of new, two-to-four lane roadway in the west end of Ottawa, Ontario. The road will eventually be upgraded to four lanes to accommodate future traffic projections for the Kanata area.

The City of Ottawa, the proponent, has applied for funding through the Government of Canada's Infrastructure Stimulus Fund. This triggered the requirement for a screening-level environmental assessment to be conducted pursuant to the Canadian Environmental Assessment Act (CEAA). The realignment of a watercourse will require a federal authorization under the Fisheries Act and also triggers a screening-level federal environmental assessment. This report, prepared by Dillon Consulting Limited (Dillon), represents the results of the screening.

A screening for the Terry Fox Drive extension – Part A (from March Road to Second Line Road) was completed and approved by Infrastructure Canada on February 11, 2010. The Part B project represents a continuation of the roadway approved in Part A. The project was phased in order to facilitate an advanced construction on Part A and to meet the Government of Canada's timelines for stimulating the economy under Canada's Economic Action Plan.

Infrastructure Canada has identified this project as File No. 2655

1.1 Project Location

This Part B project includes the construction of 3.6 km of new roadway. The Part B location is part of the outer edge of the Urban Boundary adopted in the 2006 Official Plan Amendment by the City of Ottawa and lies between the Second Line road allowance in the north-east to just beyond the Richardson Sideroad intersection area in the south-west (**Figure 1**).

The new roadway passes over about 1,910 m of clay floodplain and open farmland along the Carp River, and then enters forested lands, perched on Canadian Shield bedrock in the Shirley's Brook watershed for the rest of the 1,800 m distance. Through the latter forested segment, the road passes through the South March Highlands Provincially Significant Wetland (PSW) Complex / Candidate Area of Natural and Scientific Interest (ANSI). This area lies over the hilly terrain of the Shield, most of which is forested in a regenerating mix of coniferous and deciduous trees and with a number of small wetlands.

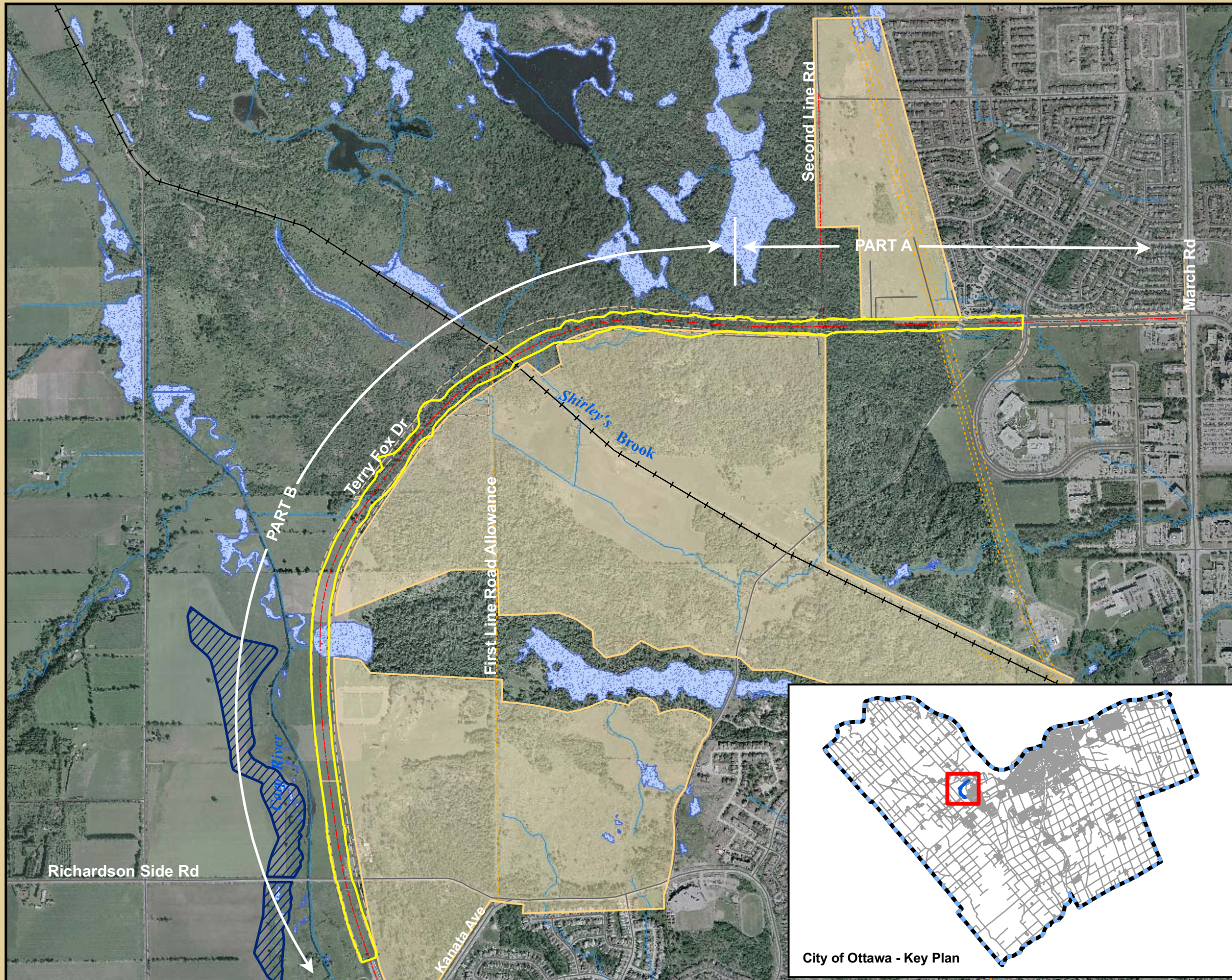
1.2 Need for Road Widening/Extension

The City of Kanata and Regional Municipality of Ottawa Carleton (MOC) Official Plans, both of which now form the City of Ottawa, identify the Terry Fox Drive corridor from March Road to Eagleson Road as a second continuous north-south arterial road in addition to Eagleson/March Road (Dillon Consulting, 2000).


The completion of Terry Fox Drive will reduce traffic congestion along Goulbourn Forced Road, connect two developed areas of Kanata and enable the expansion of the urban area as approved by the City of Ottawa in the 2006 Official Plan Amendment and Green Space Master Planning process. The curvilinear arc of Terry Fox Drive will define the outer western boundary of the City of Ottawa urban area. Interim and permanent provisions in the roadway and stormwater management design have been made for this planned growth adjacent to the new roadway.

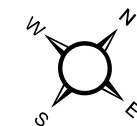
Terry Fox Drive Road Corridor Canadian Environmental Assessment Screening Part A & B

Figure 1: Study Areas



Legend

-  Grading Limit Footprint
-  TFD Right of Way
-  Road Centreline
-  Railway
-  Hydro Lines
-  Wetland
-  Floodplain Cut Area
-  Watercourse
-  Future Land Development

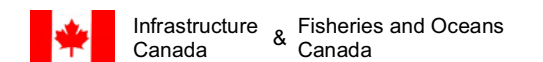


Meters

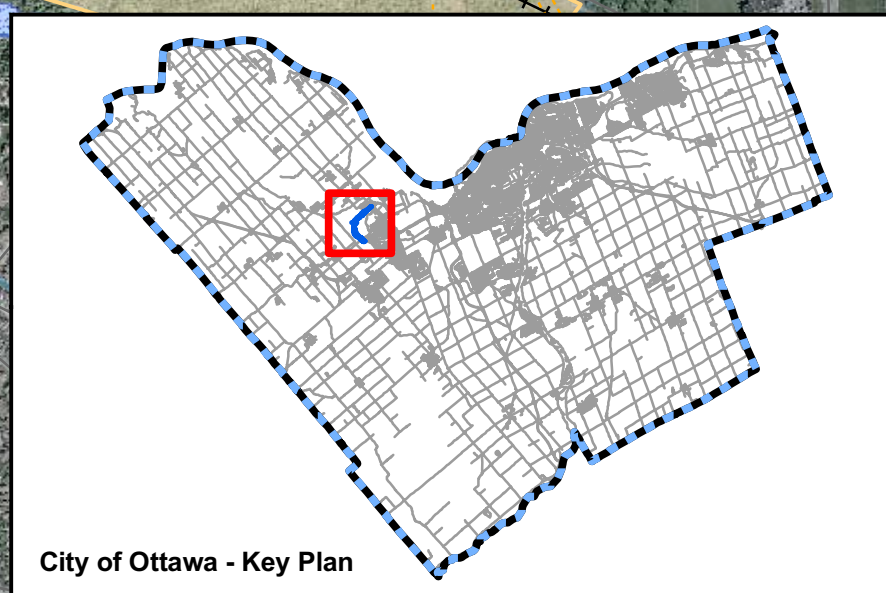
0 120 240 480 720 960

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Projection: UTM NAD83, Zone 18



Project Name: Terry Fox Drive EA
 Map Created By: AZ/SFG
 Map Checked By: ST
 Date Created: July 14, 2009
 Date Modified: April 1, 2010
 File Name: I:\GIS\091518 - Terry Fox Drive Final
 Design\Mapping\Part B Figures - CEAA 113009/
 Figure 1 Study Areas.mxd



City of Ottawa - Key Plan

The need for the widening/extension of Terry Fox Drive to create a continuous roadway from March Road (at the existing Terry Fox Drive) to Eagleson Road (at Hope Side Road) is driven by existing traffic demands and planned development in North Kanata. Without the proposed modifications, there will be both a north-south arterial roadway capacity deficiency and a north-south arterial roadway access deficiency by 2021. The extension of Terry Fox Drive between Campeau Drive and March Road is also identified as a specific requirement in the Kanata North Expansion Area. Within the overall 32,000 dwelling units allocated in the Region's Official Plan for Kanata as a whole, 3,100 dwelling units are expected to be located in the South March and Kanata North Expansion Areas (Dillon Consulting, 2000).

The ultimate completion of Terry Fox Drive is intended to relieve traffic congestion on, among others, Goulbourn Forced Road, the current connector road servicing the area. This section of TFD, including intersection improvements, is the Second Phase (Part B) of the completion of TFD. This project, along with the subsequent completion of Phase One (Part A), and the connection of TFD to Second Line Road is intended to considerably improve traffic flow in the area.

1.3 Project Background

The Terry Fox Drive project, including both Parts A and B, has been subject to examination and various planning studies since the 1980s. As a result of these past studies, planning decisions have been made, a road design proposed and follow-up commitments have been proposed. This past work has provided a basis for the completion of this CEAA screening. The following sections provide a brief historical overview of project work to-date.

1.3.1 Ontario Municipal Board Decision (1983)

A hearing was held in 1983 to determine the disposition of the lands held by KNL Development Ltd., Lakeside Lands, known herein as the 'KNL Lands'. A large percentage of the lands were covered by forests, wetlands and tributaries of Shirley's Brook, so the intrinsic ecological value of the area was recognized, however this hearing was before the Federal Wetlands Policy (1991), the Provincial Wetlands Policy (1992) or the much later Provincial Policy Statement (2005). This decision therefore predates the designation of parts of the South March Highlands as Provincially Significant Wetlands (PSW) and Area of Natural and Scientific Interest (ANSI) as described in **Chapter 6** herein. The Ontario Municipal Board (OMB) decided to bring the lands into the urban boundary of the City of Kanata, with the limitation that 40% of the natural areas should be dedicated to the City for nature preservation. This became known as the 40% Open Space Agreement rule, which has been applied to the planning decisions concerning these lands since that time.

An archival copy of the OMB decision and related planning documentation has been included in **Appendix M**.

1.3.2 Municipal Class EA (2000)

A Municipal Class Environmental Assessment (EA) (Schedule 'C') under the *Ontario Environmental Assessment Act* was completed by the Regional Municipality of Ottawa-Carleton (now City of Ottawa), for the road between March Road and Eagleson Road (October 2000). The project underwent the following:

- Consultation with members of the public;
- Consideration of reasonable route alternatives;
- Consideration of aspects of natural, social, and economic environment;
- Systematic evaluation of all net environmental effects; and,

- Complete (traceable and defensible) documentation of the decision-making process.

Some of the issues dealt with in the Class EA were:

- Planning the route alignment to avoid major environmental features was the main objective of the study;
- Level crossing and future grade-separation at the Arnprior-Ottawa railway crossing;
- Large complex of Provincially Significant Wetlands and an Area of Natural Scientific Interest;
- Irregular terrain due to the transition from a clay plain to the bedrock-dominated Canadian Shield;
- Wildlife communities and the isolated nature of the area;
- Private property impacts; and,
- Floodplain impacts along the Carp River.

Under the Province of Ontario Class EA process, upon the release of the Environmental Study Report, the project can proceed to implementation unless “Part II Order” requests (“EA elevation”) are received. At the time, there were no outstanding elevation requests in relation to this Class EA and as such, the project could proceed to implementation under the Ontario EA Act.

1.3.3 Terry Fox Drive EA Addendum (2004)

In 2004, an addendum to the Environmental Assessment was initiated to update the design and improve the traffic planning based on new information following the transfer of the City of Kanata responsibilities to the City of Ottawa. The project underwent the following:

- Preparation of a preliminary design report;
- Functional design brief update;
- Update of the design modifications around Second Line and Goulbourn Forced Road;
- Reviewed need to address 2003 Species at Risk federal legislation;
- Updated environmental mitigation strategies;
- Prepared initial routing for realignment of Shirley’s Brook; and,
- Consultation with the members of the public;

During the notification period of completion in January 2005, a request for further consideration was initiated by a member of the public who sought an additional intersection to service his lands. As a result of this request, the 2007 Class EA Addendum and Preliminary Design Report, as noted below, was published. This bump up was addressed satisfactorily and rescinded in 2007. The EA Addendum was therefore approved as of February 14, 2005.

1.3.4 City of Ottawa Official Plan Amendment (2007)

The City of Ottawa completed a wide ranging amendment as part of the transfer of responsibilities from the Region of Ottawa-Carleton to the City of Ottawa. Amendment 16 is relevant to this project, in that the entire area within the arc of Terry Fox Drive was brought into the urban boundary. This included the KNL lands as previously ordered by the OMB, as well as the lands west of the First Line Road allowance. Following the 40 % rule established by the OMB in 1983, various parcels of land were set aside, either as Natural Areas or Open Space. In particular, the lands surrounding the Kizel Drain wetland, the Richardson Ridge Forest and Trillium Woods were reserved for Natural Environment Areas. Schedule B

of OPA 16 in **Appendix M** more clearly defines the areas to be used for General Urban Area for residential development, areas of Major Open Space and those for Urban Natural Features which will be retained.

1.3.5 Class EA Addendum (2007)

In 2007, a Preliminary Design Report (PDR) and an EA Amendment was prepared to confirm technical details for the road. The 2007 EA Addendum included the following changes to the proposed project:

- Modifications to the roadway cross-section;
- Modifications to the roadway alignment;
- Updates to documentation due to the new federal Species at Risk Act; and,
- Identification of property requirements for rail grade-separation.

As noted above, while one elevation request was made on the EA Addendum by Mr. Ed Balys in 2005, this elevation request was subsequently withdrawn by the requester as the issue was resolved by the City as a result of this additional study. As such, the project can proceed to implementation under the Ontario EA Act.

1.3.6 Current Study – 2007 – Present

Since the completion of the PDR and EA Addendum in 2007, additional revisions to the roadway design have been made. Those related to Part B of the project include:

- The City has worked with adjacent landowners to combine Stormwater Management Facility strategies;
- The roadway profile has been altered to narrow the footprint and reduce the volume of fill used along the Carp River floodplain (**Chapter 7**) and,
- The City has reviewed and upgraded the intersection locations pending development proposals.

In addition, a Stage 3 archaeological investigation has been completed for the project and additional biological field investigations were undertaken in July 2009 to confirm the location of potential species of concern. Detailed geotechnical work has also been completed.

1.4 CEAA Triggers

On June 5, 2009, the federal and provincial governments committed to the City of Ottawa a funding allotment of \$47.7 million for the construction of a section of Terry Fox Drive including both this Part B project and the Part A project. In accordance with the guidelines set out through the application process, projects approved under the Infrastructure Stimulus program are to be completed by March 2011. Many of the regulatory details and timelines surrounding the funding have not yet been finalized. The conditions and deadlines associated with this funding will impact the schedule of the construction phasing for this project.

The commitment of federal funding to the Terry Fox Drive project by Infrastructure Canada is a trigger under the *Canadian Environmental Assessment Act*. Infrastructure Canada will therefore be the Responsible Authority for the project. An Authorization under the *Fisheries Act* will be required for the harmful alteration of fish habitat as the east tributary to Shirley's Brook is realigned and is also a trigger under the *Canadian Environmental Assessment Act*. The Department of Fisheries and Oceans will therefore also be a Responsible Authority for the project. Environment Canada has expressed an interest in several aspects of the project and will be participating as an expert federal authority.

No land is currently in federal ownership within the project area.

The City of Ottawa currently owns the Arnprior-Nepean rail line and will provide internal approvals for the level crossing.

No watercourses of significant size are crossed which may have the potential to trigger *Navigable Waters Protection Act* Approvals. Approvals under the *Migratory Birds Convention Act* are not expected as impacts to breeding birds are mitigable by adjustments to the construction schedule.

Species at Risk (SAR) as listed by COSEWIC on Schedule 1 under the Species at Risk Act (SARA) have been identified on or near the alignment that will need consideration by the Canadian Wildlife Service as part of the Expert Advice to be provided by Environment Canada. Species at Risk found here include:

- Butternut - tree;
- Golden Winged Warbler - bird;
- Blanding's Turtle - reptile;
- American Ginseng - herbaceous plant.
- Western Chorus Frog - amphibian

Several other SAR have the potential to be found here as Species of Concern, however most have not been observed during field work over the many years of study by different agencies.

Provincial agreements will be required for the removals and offsetting compensation of Butternut and American Ginseng.

1.5 Notification of Other Jurisdictions

The City of Ottawa is the proponent for the project and is therefore aware of the project and commencement of the CEAA process. The Province of Ontario is aware of the project through its past involvement in the Class EA process. Letters of intent regarding provincial approvals for at-risk species have been sent to the Ontario Ministry of Natural Resources (MNR) and the Mississippi Valley Conservation Authority (MVCA). First Nations consultation has been conducted as detailed herein as part of the federal environmental review process. If other permits or approvals are required, or other specific matters require provincial involvement, provincial authorities will be duly consulted and kept informed.

1.6 Legislation Considered

The project will be completed in accordance with the requirements of the following federal and provincial environmental legislation and the regulations made pursuant to them:

Federal:

- *Canadian Environmental Assessment Act (CEAA);*
- *Canadian Environmental Protection Act (CEPA);*
- *Fisheries Act (FA);*
- *Navigable Waters Protection Act (NWPA);*
- *Species at Risk Act (SARA);*

- *Canada Wildlife Act;*
- *Migratory Birds Convention Act (MBCA); and,*
- *Canadian Guidelines for Use of Explosives in Canadian Fisheries Waters.*

Provincial:

- *Ontario Endangered Species Act (ESA);*
- *Ontario Environmental Protection Act;*
- *Ontario Lakes and Rivers Improvement Act;*
- *Conservation Authorities Act; and,*
- *Ontario Water Resources Act.*

The construction of the roadworks will adhere to the most recent versions of federal and provincial guidelines and specifications, including Department of Fisheries and Oceans (DFO) Guidelines, Operational Statements and the relevant Ministry of the Environment (MOE) and Natural Resources (MNR) guidelines and specifications:

- Transportation Association of Canada (TAC) National Guide to Erosion and Sediment Control on Roadway Projects;
- DFO Guidelines for blasting near watercourses; and,
- Ontario Water Resources Act for stormwater drainage and management;

1.6.1 Permit Requirements

A number of authorizations, permits and approvals may be required for this undertaking, as illustrated in **Table 1-1**. An appropriate amount of time should be scheduled to obtain all necessary permits and approvals prior to construction if required.

Table 1-1 - Authorizations, Permits and Approvals

Agency	Authorization/Permit/Approval
<i>Federal</i>	
Fisheries and Oceans	<ul style="list-style-type: none"> • An authorization under the Federal Fisheries Act (DFO) will be required for the proposed closure of 190 m of the East Shirley’s Brook tributary and offsetting 250 m creek realignment; • Consideration under the federal Navigable Waters Protection Act will be required. Work must be constructed in accordance with the Minor Work and Minor Navigable Waters Ministerial Order, most recently published May 9, 2009. All watercourse crossings are minor works and it is expected that no permit or authorization will be required under NWP.
<i>Provincial</i>	
Ministry of Natural Resources	<ul style="list-style-type: none"> • Species at Risk as above will need to be considered under the Ontario Endangered Species Act of July 2008. An exemption applies to some or all of these species as this project was Provincially EA approved in 2000. Agreements with the MNR for Butternut and American Ginseng are required for both the Part A and Part B portions of the project.
Ministry of Environment	<ul style="list-style-type: none"> • Certificates of Approval will be required from the Ministry of the Environment, for the construction and operation of storm sewers, stormwater management facilities, creek relocation and dewatering discharge points;

Agency	Authorization/Permit/Approval
	<ul style="list-style-type: none"> • A Permit to Take Water may be required from the Ministry of the Environment (MOE) if a flow diversion or pumping is required for the Shirley’s Brook realignment or for dewatering during the installation of culverts and roadbeds.
Ministry of Culture	<ul style="list-style-type: none"> • Clearance from the Ontario Ministry of Culture on a Stage IV study relating to the potential discovery and protection of heritage resources at the Richardson Farm Site.
Conservation Authority	
Mississippi Valley Conservation	<ul style="list-style-type: none"> • A permit to construct in a Regulated Area will be required under the Conservation Authorities Act, Regulation 166/06 (coordinated through the Mississippi Valley Conservation) as the roadway impacts the regulatory floodplain of the Carp River and adjacent (non significant) Wetland; • A channel alteration permit will be required for the placement of hydraulic culverts, the realignment of East Shirley’s Brook watercourse and the construction of the roadway through two (2) Provincially Significant Wetlands.