## **Environmental Assessment Approval**

## **Approval Date:**

# Highway 107 Burnside to Bedford Project Department of Transportation and Infrastructure Renewal

Halifax County, Nova Scotia

The Highway 107 Burnside to Bedford Project (the "Project"), proposed by: Department of Transportation and Infrastructure Renewal (the "Approval Holder") in Hants County, Nova Scotia is approved pursuant to Section 40 of the *Environment Act* and Section 13(1)(b) of the Environmental Assessment Regulations. This Approval is subject to the following conditions and obtaining all other necessary approvals, permits or authorizations required by municipal, provincial and federal acts, regulations and by-laws before commencing work on the Project. It is the responsibility of the Approval Holder to ensure that all such approvals, permits or authorizations are obtained before commencing work on the Project.

This Environmental Assessment Approval is based upon the review of the conceptual design, environmental baseline information, impact predictions, and mitigation presented in the Registration Document and Addendum.

## **Terms and Conditions for Environmental Assessment Approval**

## 1.0 General Approval

- 1.1 The Environmental Assessment Approval for the Project is limited to the Project as described in the Environmental Assessment Registration Document. Any proposal by the Approval Holder for expansion, modification or relocation of any aspect of the project from that proposed in the Registration Document must be submitted to the Environmental Assessment Branch for review and may require an environmental assessment (EA).
- 1.2 The Approval Holder must, within two years of the date of issuance of this Approval, commence work on the Project unless granted a written extension by the Minister.

The Approval Holder must notify Nova Scotia Environment (NSE) of the

- commencement date of the Project at a minimum 30 days prior to the commencement, unless otherwise approved by NSE.
- 1.3 The Approval Holder must not transfer, sell, lease, assign or otherwise dispose of this Approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of an approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.
- 1.4 The Approval Holder must implement all mitigation and commitments in the Registration Document and Addendum, unless otherwise approved by NSE.

## 2.0 Surface Water Resources

- 2.1 The Approval Holder must not undertake any Project related activities within 30 metres of watercourses and/or wetlands unless otherwise approved by NSE. No development or removal of vegetation within this 30 metre buffer is permitted unless otherwise approved by NSE.
- 2.2 The Approval Holder must obtain approval under the Activities Designation Regulations from NSE regarding wetland and watercourse alterations related to the Project.
- 2.3 Prior to commencement of wetland alteration related to this Project, the Approval Holder must develop a wetland compensation plan, including where possible on-the-ground restoration of wetlands and/or wetland function in the watersheds affected by this Project. The Approval Holder must implement the plan once approved by NSE, and must complete the plan within 3 years of the wetland alteration (unless otherwise approved by NSE).
- 2.4 Prior to commencement of the Project (unless otherwise approved by NSE), the Approval Holder must submit a water management plan to mitigate Project related impacts such as drainage and runoff on nearby surface water resources including Anderson Lake. The Approval Holder must implement the program once accepted by NSE.
- 2.5 Prior to commencement of the Project, the Approval Holder must develop and implement erosion and sedimentation control measures to mitigate the potential release of sediments into the environment as a result of Project related activities. The approval Holder shall submit the plan to NSE prior to commencement of the project. The Approval Holder must implement the plan once accepted by NSE.

- 2.6 Prior to commencement of the Project (unless otherwise approved by NSE), the Approval Holder must submit a surface water monitoring program including sampling locations, parameters and frequency. The Approval Holder must implement the program once accepted by NSE. Based on the results of the monitoring program, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE.
- 2.7 Prior to operation of the Project, the Approval Holder must provide details of a salt management plan that must include specific details on how the Project operations phase is designed to protect nearby water resources. The Approval Holder must implement the program once accepted by NSE.

#### 3.0 Groundwater Resources

3.1

Prior to commencement of the Project (unless otherwise approved by NSE), the Approval Holder must provide NSE a standardized baseline survey report of existing water supply wells within 500 meters of the centerline of the new highway alignment. The pre-construction survey report must contain detailed information about the water well supply including:

- Location coordinates of the water supply in GPS UTM coordinates (northing and easting);
- Indication of the water supply type (e.g. drilled well, dug well, other):
- Indication of water supply use (e.g. commercial business, industrial use, residential use, registered public drinking water supply); and
- Indication if municipal supply is also available and used.

In addition, water supply samples must be collected and analyzed for total and fecal coliform bacteria, pH, general chemistry and metals. The survey results are to be tabulated and compared to relevant regulations and guidelines.

3.2 Prior to any blasting, the Approval Holder must develop, submit and upon approval, implement an updated blasting plan. The plan must include an updated pre-blast survey (conducted in accordance with the NSE "Procedure for Conducting a Pre-Blast Survey") for structures and water wells within 800 meters of the blast area, a detailed blast monitoring plan,

- and a full blast damage response policy.
- 3.3 The Approval Holder must replace, at their expense, any water supply which has been lost or damaged as a result of Project operations to the satisfaction of NSE.

#### 4.0 Flora and Fauna

- 4.1 Prior to commencement of the Project, the Approval Holder must provide Nova Scotia Department of Natural Resources (DNR), Wildlife Division with digital way points and/or shape files revealing precise locations for species listed under the *Species at Risk Act* (SARA) and/or *Endangered Species Act* (ESA) as well as all S1, S2 and S3 listed species under the Atlantic Canada Conservation Data Center (ACCDC), identified during field work within the area of the Project. The date of the above noted field data must also be provided to DNR. The Approval Holder must report to NSE that the files have been provided to DNR.
- 4.2 The proponent must avoid S2 and S3 plants on non- right of way areas of the project
- 4.3 All road shoulders and disturbed soils must be replanted with native grass or a native seed mix.
- 4.4 Three years after construction is complete the proponent must complete an alien invasive plant survey; completed by a qualified botanist. If high risk alien invasive species are discovered the proponent must conduct an invasive species management plan to reduce or eliminate invasive species spread.
- 4.5 Bridge and overpass abutments and approaches on streams connected to Anderson Lake must have low profile diversion fencing to reduce movement of turtles towards the highway
- 4.6 The Approval Holder must clear vegetation outside of the breeding season for most bird species (April 15 to August 15), unless otherwise authorized in writing by NSE. Vegetation clearing shall be recorded in a daily log that shall be available for review by the department indicating the date and time of the clearing operation and the contractor.

#### 5.0 Air Quality and Noise

- 5.1 At the request of NSE, the Approval Holder must develop and implement an air quality and/or dust monitoring plan. This plan must include but not be limited to sampling locations, parameters, monitoring methods, protocols and frequency. Based on the results of the monitoring programs as proposed, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE.
- 5.2 At the request of NSE, the Approval Holder must monitor noise levels. Based on the results of monitoring program as proposed, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE.

## 6.0 Archaeological and Heritage Resources / Aboriginal Interests

6.1 The Approval Holder must cease work and contact the Special Places Coordinator, Nova Scotia Department of Communities, Culture and Heritage (CCH) immediately upon discovery of an archaeological site or artifact unearthed during any phase of the Project. If the find is of certain or suspected Mi'kmaq origin, the Approval Holder must also contact the appropriate Mi'kmaq representatives as advised by CCH.

#### 7.0 Public Consultation

- 7.1 Prior to commencement of the Project, the Approval Holder must develop and implement a complaint resolution plan to address all concerns associated with the Project. As part of the plan, the Approval Holder must appoint a contact person designated to deal with complaints, and must provide the contact information to NSE.
- 7.2 At the request of NSE, the Approval Holder must form a Community Liaison Committee (CLC). The NSE's Guidelines for the Formation of a Community Liaison Committee should be used for guidance. The Approval Holder must operate the CLC for the duration of the Project and until released in writing by NSE.

## 8.0 Engagement with the Mi'kmaq of Nova Scotia

8.1 The Approval Holder must develop and implement a Mi'kmaq Communication Plan for the Project, which will include a process for communicating Project details and seeking input from the Mi'kmaq community.

#### 9.0 Contingency Plans

9.1 Prior to commencement of the Project, the Approval Holder must develop and implement a spill contingency plan which meets NSE's Contingency Planning Guidelines. The plan must address accidental occurrences including but not limited to: spills of hydrocarbons or other hazardous materials, failure of erosion and sediment control measures, fires, and vehicular collisions. A copy of the plan shall be submitted to NSE prior to commencement of the project

Margaret Miller, MLA Minister of Environment

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