

10.0 Monitoring and Follow-Up Programs

This section provides a statement of monitoring activities that are necessary to ensure that proposed mitigation is implemented and functioning as expected, and actions necessary to maintain the effectiveness of mitigation as long as required to provide the required level of environmental protection.

Pre-construction Monitoring

Pre-construction monitoring is undertaken to provide baseline conditions for comparison to conditions during and after construction. The EA and studies for this report provide baseline for some environmental features.

A number of activities will be undertaken by the City of Ottawa prior to construction. These include:

- Acquisition of permits including Butternut Permit from province and MOE permits;
- Environmental awareness review for the contractor (including programs for Species at-risk). This usually occurs with the construction manager and his foremen; and
- A pictorial record of conditions is compiled to compare restoration efforts with pre-construction conditions.

Conditions of regulatory approvals may require additional pre-construction monitoring programs as well.

10.1 Environmental Compliance Monitoring

ECM can be divided into two elements: regulatory environmental surveillance and self regulatory environmental compliance monitoring. Regulatory environmental surveillance is carried out by regulatory authorities. Self-regulatory environmental compliance monitoring is that which the proponent undertakes to monitor its own activities against internal and external environmental standards. Self regulatory ECM overlaps with regulatory environmental surveillance where the external standards which are being monitored are regulatory in nature. However, self-regulatory ECM is a much broader concept and is an important tool for the

implementation of mitigation, particularly where government regulations are vague or non-existent. Self-regulatory ECM can involve:

- Monitoring of all environmentally-sensitive activities to ensure compliance with internal and external non-regulatory environmental standards;
- Coordination of communication with regulatory authorities; and
- Provision of on-site environmental advice to Project personnel.

An Environmental Inspector will be present during construction to ensure that the contractor is working in an environmentally acceptable fashion and for any other environmental issues that may develop during roadway construction. The primary objective of environmental inspection/compliance monitoring during construction is to ensure that all activities are carried out pursuant to pertinent environmental legislation, regulations and industry standards and to adhere to the mitigation measures prescribed in this environmental assessment screening report. In addition, post-construction follow-up will be completed to ascertain the success of the restoration/mitigative efforts.

In order to ensure the implementation of mitigation measures specified in this report a compliance monitoring report will be prepared by the City of Ottawa (or its' contractor) during construction (and after if the applicable) and will be submitted to Infrastructure Canada after the project is completed (including the removal of all temporary works).

10.2 Follow-up Programs

No specific follow-up programs consistent with s. 38(1) of *CEAA* have been identified.

Follow-up with respect to Species at-risk will be undertaken through the provincial ESA process.

The Ontario Ministry of Culture requires that Stage 4 mitigation of the O'Brien Farm site (north component) be undertaken prior to development (Sherratt, 2009). The extent of the mitigation is to be determined in consultation with the Ontario Ministry of Culture.

10.3 Additional Mitigation and Management Commitments

As per INFC requirements, the City will comply with the following mitigation/management measures for the project.

MITIGATION AND MANAGEMENT OF POTENTIAL ADVERSE ENVIRONMENTAL EFFECTS

Environmental Management

In addition to the VEC-specific mitigation identified, the proponent must also implement the following measures to ensure responsible environmental management of the project:

a) Site access

If requested, the proponent must provide Infrastructure Canada or its designate(s) with access to the project site(s) to monitor construction activity and to confirm compliance with the terms and conditions of its environmental approval.

b) Environmental reporting

Infrastructure Canada must be notified in a timely manner if the following circumstances arise during project implementation:

- If there are significant changes to the project that may cause adverse environmental effects warranting additional mitigation, the proponent should describe those changes and the measures it will take to mitigate any associated potential adverse environmental effects.
- If the required mitigation measures are determined to be ineffective or if the project causes unanticipated adverse environmental effects or public concerns, the proponent should identify the measures it will take to mitigate and respond to those concerns.

c) Declaration of substantial completion

All projects for which Eligible Costs have been claimed must file a “Solemn Declaration of Substantial Completion by a Registered Professional” before Infrastructure Canada can

consider the issuance of final payment. The Declaration for this project must indicate whether:

- The work conforms with applicable environmental legislation;
- The mitigation measures specified in this approval have been implemented; and
- There are outstanding adverse environmental effects in respect of which the proponent intends to carry out additional remedial measures.

d) Record keeping

Documents pertaining to the environmental review and approval of the project such as copies of environmental authorizations and monitoring, inspection and compliance/enforcement orders from regulatory authorities must be retained on file and made available, if required, for audit and evaluation purposes.