# REGISTRATION PURSUANT TO CHAPTER E-14.2 OF THE ENVIRONMENTAL PROTECTION ACT, SNL 2002

# **ENVIRONMENTAL ASSESSMENT**

# FOR THE CONSTRUCTION OF A PEDESTRIAN UNDERPASS NEAR HUMBER RIVER ROUTE 430 KM 8.0

July 7, 2021

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# Appendix A: General Project Details

#### **PROPONENT:**

# i. Name of Corporate Body

Department of Transportation and Infrastructure Government of Newfoundland & Labrador

#### ii. Address

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#### iii. Chief Executive Officer

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iv. Approval for Environmental Assessment Submission

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Date

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Assistant Deputy Minister

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# v. Principal Contacts for the Purpose of Environmental Assessment

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#### THE UNDERTAKING:

# (i) Name of the Undertaking

The construction of a pedestrian underpass on Route 430.

# (ii) Nature of the Undertaking

This Environmental Assessment Registration is for the installation of a 3.0m diameter pedestrian underpass across Route 430 in the vicinity of the Humber River Nature Trail.

# (iii) Purpose / Rationale / Need for the Undertaking

The purpose of this project is to allow pedestrians to cross Route 430 safely rather than jump the guiderail and cross the road.

# **Description of the Undertaking**

# Geographic Location

Project is located on Route 430. The Eastern invert (Easting: 382679.399, Northing: 5451078.396) and Western invert (Easting: 382663.687, Northing:

5451058.312) is located approximately 15m south of the Humber River.

An alternative consideration could be building an overpass for trail users over Route 430. This would be equally as challenging as building an underpass.

# Physical Features.

Humber River is a Scheduled Salmon River and detailed design work and existing environmental conditions determine the protection measures which will be required. All works will be undertaken outside the water and special attention will be given to erosion and sedimentation prevention.

The centerline of the proposed structure is located approximately 15 m south of the Humber River and the inlets/outlets of the new culvert fall within the flood plain and protected wetland area. The contractor will dig and install the culvert across Route 430. Equipment used will mainly be an excavator, grader, plate tamper, and tandem truck. Approximately 70m of new trail to be constructed to link the western side of the Humber River nature trail to the eastern side, eliminating to the need to cross the road at grade. This 70m trail link would be constructed as part of the underpass project. Currently people just cross the road which is very unsafe. This underpass will eliminate the need for them to cross the busy road at grade. The parking lot would function as it does now.

The area needing to be cleared will be approximately 450 square meters and is within the existing Right Of Way, most being in the pre-existing fill from the road. The vegetation consists of roadside forbs such as grasses and small herbaceous plants. Infilling of the wetland area and areas below the Humber River's high-water mark will be required to construct this underpass and to tie in the proposed trail to the existing. There are sedges, rushes, and wetland grasses in this area. Armour stone will be placed around the infilled areas to prevent erosion.

The Department of Transportation and Infrastructure will consult with the Water Resources Division of the Department of Environment, Climate Change, and Municipalities to ensure that the best available data is utilized to design the underpass. The Water Resources Division's Environmental Guidelines for work around watercourses will be used during the design and construction phases. At

high water levels the inlet/outlet of this pipe will be subject to flooding.

The underpass will be designed and constructed in consultation with Fisheries and Oceans Canada (DFO) to have minimal impact on fish and fish habitat.

The nearest receptors are the Gateway to the North RV Park and the Newfoundland Insectarium. Deer Lake and Nicholsville are the nearest communities. There will be temporary construction slowdowns during installation as well as moderate noise during the workday.

Route 430 will be possibly be excavated in sections to maintain traffic flow to install the culvert where only one lane at a time will be excavated. Either one lane of traffic will be maintained through the site during excavation or traffic will be routed through a detour. This will be decided by executive, regional office and traffic engineer. The installation is anticipated to take two to four weeks to complete.

All vehicles will be in good running order with functioning exhaust systems. Dust will be at a minimum with a project of this nature where it is excavation and infilling. We don't anticipate dust becoming an issue but if it does, a water truck or other means of containing dust will be implemented. The impact on travelers will be a temporary reduction of flow. There will either be one lane of traffic maintained through the site during excavation or traffic will be routed through a detour. This will be decided by executive, regional office and traffic engineer.

Approximately 70m of new trail is to be constructed to link the western side of the Humber River nature trail to the eastern side, eliminating to the need to cross the road at grade. This 70m trail link would be constructed as part of the underpass project.

### Construction

We anticipate the proposed underpass to be a 3.0 meter diameter culvert with a crushed stone bottom. It will be installed in the area on route 430 just south of the Humber river bridge between Deer Lake and Cormack. There may be a concrete coping wall around the inlets with possible railing or guide rail along the roadway in

this section.

All work under this item will be in accordance with Section 919.04 of the Departments Specifications Book, MAINTENANCE OF TRAFFIC, except where superseded by the requirements of this or another Supplementary General Condition.

Underpass construction will be performed by contract forces. The various phases will involve:

- (a) field surveys;
- (b) relocation of underground utilities
- (c) diversion construction (if required)
- (d) new underpass construction;
- (e) infill of inlet and outlet areas; tie in of proposed trail into existing trail network
- (f) clean-up and rehabilitation.

The potential sources of pollution during construction would be limited to the possible siltation of the river during subgrade construction. To prevent siltation within the river during construction the contractor shall use the mitigation in the Specification book, Sections 815, 816, 817, 818 and 845. In addition, the potential exists for hydrocarbon spillage from temporary fuel storage facilities. Contractors will be advised of the environmental requirements for stream crossings and for hydrocarbon spill reporting and the necessity of strict compliance.

The start date currently is unknown and the project is expected to take 2-4 weeks.

# Owner's Policy (Division 8, General Specifications Book, 2011)

To ensure protection of the environment, the work at all times shall be subject to inspection by the staff of relevant municipal, provincial and federal agencies. Normally, all inspections other than by the Engineer will be arranged in advance through the Engineer. Any specific matters relating to environmental protection

will be dealt with between the Contractor and the Engineer.

Any violations of environmental permits or authorizations or any environmental related incidents which are observed by inspectors representing regulatory agencies are to be reported by them prior to leaving the site to the Engineer. Except in emergency situations, environmental protection measures required by other agencies must be approved by the Engineer prior to implementation by the Contractor.

It is Owner's policy to protect the environment along the route of the project, in areas adjacent the route, and in associated work areas such as pit or quarry sites. DTW is committed to cost-effective environmental protection measures that will prevent serious or irreversible environmental damage through the planning and implementation phases of the project.

### Protection of Vegetation and Wetlands

The Contractor shall be made aware that the work required in and around water crossings shall be performed with due care and caution so as to prevent undue disturbance to adjacent vegetation and wetlands from construction activities and off Right Of Way travel (Section 850). Immediately following and during some construction activities, the Engineer may identify areas requiring seeding/sodding or stabilization by a method to prevent erosion. Damage or disturbance of vegetation and/or wetlands outside the ROW shall be re-vegetated and/or restored to the satisfaction of the Resident Engineer at the Contractor's expense (Section 855).

# Storage and Handling of Fuels and Other Hazardous, Toxic, or Dangerous Material

All storage tank systems must be registered under and in compliance with Newfoundland Regulation 58/03, The Storage and Handling of Gasoline and Associated Products Regulations, 2003 before commencing operation. Registration does not apply to storage tank systems of a capacity less than 2500 litres that are connected to a heating appliance. Contractors shall supply verification of storage tank registration to the Engineer prior to the commencement of work (Section 820).

# **Contractor Environmental Mitigation Plan**

A Contractor Environmental Mitigation Plan (**CEMP**), completed by the contractor and approved by DTW before work commences, is required for this project.

# Elements required in a CEMP are:

- Pre-construction planning, including the identification project-environmental interactions (e.g., Valuable Ecosystem Components including: public and worker safety, wildlife, habitat, plants, resource users, etc.);
- Detailed environmental mitigation measures to avoid negative or irreversible environmental impacts;
- Contingency plans for unplanned events;
- List of DTW and Contractor contacts and reporting numbers; and
- Decommissioning Plan that includes site rehabilitation measures.

The potential for adverse environmental impacts during construction will be minimized as all construction activities will be undertaken in accordance with the environmental requirements of the Department of Transportation and Infrastructure Specification Book for transportation projects.

#### **Prohibitions**

The following are directives for the Owner and Contractor in carrying out this project. Reference is also provided to the Section where this prohibition is located in Division 8.

- Contractors, subcontractors and their personnel shall not harass wildlife or waterfowl or unduly disturb fish (Section 805);
- No pesticides or other products shall be used without prior approval of the Owner and the Department of Environment and Conservation (ENVC) (Section 810);
- The Contractor shall not wash equipment or containers, nor dump herbicides in or near any fresh or salt water bodies, or at any location where the herbicide may enter a body of water (Section 810);

- No person shall discharge into a body of water any sewage or effluent (Section 815);
- The use of equipment or machinery in a watercourse or water body is not permitted (Section 815);
- The contractor shall not ford a watercourse without prior approval from the Resident Engineer (Section 815);
- Silted or muddy water is not permitted to be released into any watercourse or water body or into any ditch or areas that leads directly to a watercourse or waterbody (Section 815.07);
- Smoking shall be prohibited within 10 m of a fuel storage area or during refueling operations (Section 820.03);
- Fueling or servicing of mobile equipment shall not be allowed within 100 m of a watercourse, water body, or designated wetlands (Section 820.03);
- The Contractor shall ensure that no servicing or washing of heavy equipment occurs adjacent to watercourses and designated wetlands. Fueling, servicing or washing of equipment shall not be allowed within 100 m of a watercourse (Section 820.04);
- No waste material shall be deposited in any watercourse or wetland (Section 825.01);
- There shall be no open burning of waste material, slash or grubbing material onsite. Rubber tires, waste oil, or similar material shall not be used to ignite slash or used to maintain the burning operation (Section 835);
- Unnecessary cutting of trees is to be avoided. Care will be taken during construction to prevent damage to trees and shrubs adjacent to the flagged clearing limits which are to remain after construction (Section 850);
- The Contractor shall not use living trees as survey marks and shall not cut blazes or otherwise mark live trees except with removable surveyor's tape and/or tags (Section 850);
- The Contractor shall limit equipment travel to the surveyed right-of-way and existing municipal and provincial roads. Use of equipment of any type is not permitted outside the clearing limits of the right of way without prior approval (Section 850); and
- Should any archaeological remains be encountered, such as stone, bone or iron tools, concentrations of bone, fireplaces, house pits and/or foundations, work in the area of the find shall cease immediately in accordance with the Historic Resources Act (RSNL1990 CHAPTER H-4) (Section 860).

# **Operation**

The underpass is a permanent operation.

## **Occupations**

The various types of occupations anticipated for this project may include:

- (a) Civil Engineers;
- (b) Structural Engineers; 2231
- (c) Engineering Technicians; 2231
- (d) Road Surveyors; 2154
- (e) Heavy Equipment Operators; 7521
- (f) Drillers and Blasters; 7372
- (g) Carpenters; 7271
- (h) Heavy Equipment Mechanics; 7312
- (i) Labourers; 7621
- (j) Truck Drivers; 7511
- (k) Concrete Finishers; 7282
- (l) Concrete Technicians; 7282
- (m) Material Technicians and Engineers; 2231
- (n) Steel Erectors. 7236
- (o) Senior Environmental Planner 2121

It is the Contractor's right to hire whomever fulfills the abilities and responsibilities of the job-related duties. The Owner has no involvement nor say in the personnel hired.

# **Project-related Documents**

- Contractor Environmental Mitigation Plan.
- Department of Transportation and Infrastructure Specifications Manual

#### APPROVAL OF THE UNDERTAKING

The following is a list of the permits, licences, approvals that may be necessary for this project:

#### MAJOR REGULATORY APPROVALS BY TYPE AND AGENCY

Type of Permit	Agency
1. Fuel storage & handling	Government Service Centre
2. Solid waste disposal	Government Service Centre
3. Environmental Assessment	Environment, Climate Change, and Municipalities

#### **SCHEDULE**

The Department of Transportation and Infrastructure would like to complete the requirements of the Environmental Assessment Act and seek approval for the project by 2021 08 10. A tender call could take place in summer of 2021 with construction starting shortly after.

#### **FUNDING**

The Provincial Government will fund the entire project.

# Appendix A

**General Project Details** 



Map 1: Location on Island



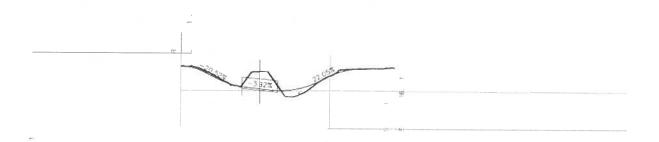
Map 2: Regional map



Map 3: Close up of site



Map 4: Details



# **Proposed Trail Realignment Profile**