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**UPPER TERRA NOVA FISHWAY
TEMPORARY CONSTRUCTION ROAD**

**ENVIRONMENTAL ASSESSMENT
REGISTRATION**

Prepared by:

**SGE Acres Limited
45 Marine Drive
Clareville, NL
A5A 1M5**

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NAME OF THE UNDERTAKING:

Upper Terra Nova Fishway Temporary Construction Access Road

PROPONENT:

Fisheries & Oceans Canada

Contact: Cliff Goodyear, P.Eng.
Director of Real Property
John Cabot Building
10 Barter's Hill
P.O. Box 5667
St. John's, NL
A1C 5X1

Telephone: 709-772 2166

CONTACT FOR ENVIRONMENTAL ASSESSMENT PURPOSES:

Andrea Powell
Environmental Officer
Public Works & Government Services Canada
John Cabot Building
10 Barter's Hill
P.O. Box 4600
St. John's, NL
A1C 5T2

Telephone: 709-772 4698

1.0 THE UNDERTAKING

The Department of Fisheries & Oceans operates and maintains a fishway and associated structures located on the upper portion of Terra Nova River. This facility has been in operation for a number of years providing adult salmon a passageway to under-utilized spawning areas on the river and improving in-stream survival rates. DFO is contemplating rehabilitation of the fishway structure and in order to facilitate the project is proposing the construction of a 5.5 km temporary construction access road from Route 301 to the site.

The proposed route as shown in appendix 'A' was selected after an extensive investigation of the general area was carried out to determine the route that would involve the least impact on the natural environment during construction and also the best area for restoration to its natural state after decommissioning.

This access road will be used during the reconstruction of the fishway facility to transport workers, equipment and materials to and from the site. Other means of access to the project site have been fully explored by the proponent however the costs involved in any other options would have been prohibitive to the overall project as well as presenting unacceptable safety and environmental concerns. Subsequent to completion of the fishway project, the roadway will be decommissioned for the purpose of re-establishing the natural drainage patterns and stream channels, recontouring the roadway slopes and to backfill the roadbed with native organic soils and revegetate.

2.0 DESCRIPTION OF UNDERTAKING

2.1 Geographical Location

The proposed access road will intersect Route 301 which is the main road to the town of Terra Nova approximately 1.5 km east of the town. At the present time, there is an existing road exiting this location and extending 800 m to a sand borrow pit. The proposed access road will continue from this existing road in a northeast direction for a distance of approximately 4.5 km to the fishway structure on the river (see attached Site Plan, Appendix A).

The access road route will be adjacent to the river system and will maintain a minimum separation distance to the rivers edge of 75 m.

2.2 Physical Features

The undertaking will essentially consist of the upgrading of 800 m of existing road and the construction of an additional 4.5 km of new road that will be built to the standards of a Class 'C' resource road as classified by the Provincial Department of Forest Resources

and Agrifoods. A typical road section is shown in Appendix 'B' which indicates the basic road design that will be followed during construction.

The access road route was selected based on the location of stream crossings, avoiding wetland areas, and limiting the amount of tree removal required. Alternate routes were investigated with the proposed route being determined as the best choice with respect to the least disruption to the natural environment and the ease of restoration after completion of the fishway project.

There are five streams located along the proposed route where temporary crossings will be designed to provide access for construction equipment. These crossings will undergo thorough hydraulic and construction loading requirement analysis to design the appropriate type of installation that will minimize adverse environmental impact on the upstream and downstream areas adjacent to the crossing.

The project site is located in the Central Newfoundland ecoregion which is a maritime influenced ecoregion covering the north-central part of Newfoundland. The ecoregion is marked by cool summers and short, cold winters. It is the most continental part of the island.

This ecoregion is classified as having a maritime mid-boreal ecoclimate. Its forests are dominated by closed, intermediate to low stands of balsam fir and black spruce on steep, moist, upland slopes. Paper birch, aspen, and black spruce are typical of disturbed sites. Drier sites are characterized by woodlands of black spruce, kalmia heath and lichens. Dwarf, open stands of black spruce and tamarack with ericaceous shrubs are found on raised domed bogs.

This ecosystem is composed of a mixture of crystalline Palaeozoic strata. Where stream erosion has cut deeply, the uplands are rugged and rocky but elsewhere they present a rolling terrain of low relief. The surface of the uplands is dominated by hummocky to ridged sandy morainal deposits with slopes that range from 5 to 30%.

Characteristic wildlife includes moose, lynx, black bear, red fox and caribou with a re-introduced population of Newfoundland martin found slightly to the north of the proposed project. The range of the martin may include the access road footprint but the population density is such that the road development would not affect the species.

2.3 Construction

The proponent anticipates construction of the access road to begin in June, 2007 and be completed by mid July, 2007. This schedule, however, would be dependent on obtaining all the necessary approvals from the various regulatory bodies. Construction involving stream crossings and general environmental protection would be favourable during this time of year with lowering rain fall and flow rates. Decommissioning of the roadway will

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start immediately after completion of the fishway reconstruction project which is expected to be during the summer of 2008.

As with any construction project, there are always potential sources of pollutants to the environment. The two main potential sources of pollutants for this project are possible siltation of the stream and river and spillage and/or leakage of fuel and oil from construction equipment. With respect to siltation, every precaution shall be taken during construction with the installation of silt screens, construction of sedimentation basins and pumping of silted waters when required. The contractor's construction activities and procedures will be closely monitored by the proponents representative on site to ensure compliance with project specifications and Provincial Environment regulations, thus keeping any siltation to an acceptable level. The potential for fuel or oil spillage will be minimized by having specific requirements in the project contract with respect to fuel storage and usage, equipment refueling location, waste material and product disposal, oil spill and clean-up guidelines and regular inspections of heavy equipment on site.

Where removal of tree cover is required, all useful wood will be salvaged and under no circumstances will wood debris or slash be dumped into or near streams or a body of water.

All topsoil or organically rich soils which are stripped during construction will be stored on site and protected from erosion for subsequent use to help revegetate during the decommissioning process. To reduce the exposure of erodible soils, appropriate scheduling will be in place so that grubbing, stripping and excavation will be quickly followed with the remainder of construction work. All infilling, compaction, grading and surfacing will be completed immediately following to stabilize and protect exposed soils.

Dust levels generated during construction will be monitored to ensure that control measures are taken if there is potential for negative impact on streams, the river or surrounding wetland habitat. Only safe methods of dust control will be allowed such as water or wood chips as opposed to calcium chlorite and oil based suppressants.

The overall road design, including route location will be developed so as to lend itself to a complete rehabilitation within a two year period. The decommissioning and rehabilitation will involve the following aspects;

- The complete removal of all bridging and culverts
- Reconstruction of any disturbed stream banks to the original contours
- Repositioning of natural stream boulders to dissipate stream flow
- Recontouring of roadway surface and embankments
- Scarify the road surface and backfill with natural organic soils for revegetation
- Reinststate all natural drainage patterns

2.4 Operation

At the present time, the fishway facility is remote and only accessible by helicopter or by boat and a walking trail. The proposed access road is essential for the reconstruction of the Terra Nova River fishway. It would facilitate the movement of manpower, equipment and materials to the site during the expected two year duration of the project.

2.5 Occupation

The workforce for this undertaking is estimated, but not limited to the following:

1. 1– engineering site representative;
2. 1– construction superintendent;
3. 1– surveyor;
4. 2– general labourers;
5. 4– heavy equipment operators.

2.6 Project Related Documents

To date, there are no generated project documents related to the access road.

3.0 APPROVAL OF THE UNDERTAKING

Prior to construction of the access road, approval from the following regulatory bodies may be required:

Permit, Authorization & Approval	Governing Body
FEDERAL	
Transportation of dangerous goods	Transport Canada
Authorization for works or Undertakings Affecting Fish and Fish Habitat	Department of Fisheries and Oceans
Permit for Construction Within Navigable Waters	Transport Canada
Notification to Handle or Transport Dangerous Goods	Transport Canada
Completion by DFO of a Federal Environmental Assessment	Canadian Environmental Assessment Agency

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PROVINCIAL	
Release from the Environmental Assessment Process	Government of Newfoundland & Labrador Department of Environment and Labour, Environmental Assessment Division
Certificate of Environmental Approval for any alteration to a water body	Government of Newfoundland & Labrador Department of Environment and Labour, Water Resources Division
Water Use Authorization	Government of Newfoundland & Labrador Department of Environment and Labour, Water Resources Division
Permit for Access off any Highway	Government of Newfoundland & Labrador Department of Works, Services & Transportation Transportation Regulation Enforcement
Authorization to Handle or Transport Dangerous Goods	Government of Newfoundland & Labrador Department of Works, Services & Transportation Transportation Regulation Enforcement
Borrow and Quarry Permit	Government of Newfoundland & Labrador Department of Mines & Energy Mineral Lands Division
Authorization to Control Nuisance Animals	Government of Newfoundland & Labrador Department of Forest Resources and Agrifoods Wildlife Division

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Permit, Authorization & Approval	Governing Body
Permit to Burn	Government of Newfoundland & Labrador Department of Forest, Resources and Agrifoods, Forest Fire Protection
Commercial Cutting Permit	Government of Newfoundland & Labrador Department of Forest, Resources and Agrifoods, Newfoundland Forest Services
Operating Permit	Government of Newfoundland & Labrador Department of Forest, Resources and Agrifoods, Newfoundland Forest Services
Certificate for Approval for Storage and Handling of Gasoline and Associated Products as per Fire Protection Act and GAP Regulations	Government of Newfoundland & Labrador Department of Government Services and Lands, Operations Division
Certificate of Environmental Approval to establish, alter, enlarge or extend a waste management or a waste disposal site or incinerate as per Waste Material Disposal Act.	Government of Newfoundland & Labrador Department of Government Services and Lands, Operations Division
Permit in Accordance with Urban and Rural Planning Act for access onto a Protected Road.	Government of Newfoundland & Labrador Department of Government Services and Lands, Operations Division
Permit for Flammable and Combustible Liquid Storage and Dispensing and for Bulk Storage.	Government of Newfoundland & Labrador Department of Government Services and Lands, Engineering Services
License of Occupation to Occupy Crown Land	Government of Newfoundland & Labrador Department of Government Services and Lands, Customer Services
MUNICIPAL	
Approval for Waste Disposal	Town/Community Council

4.0 SCHEDULE

The ideal time for construction of the access road would be during late spring and summer months when the rainfall and flow rates are at the lowest. The project has to go through the environmental assessment process, final design, design approval, tender call/award of contract and mobilization. Based on this, it is projected that the earliest start date for the project would be the second week in May and it is anticipated that construction will take four to five weeks.

5.0 FUNDING

Funding for the project is through the proponent's department of Fisheries and Oceans Canada.

APPENDIX A

SITE PLAN

APPENDIX B

TYPICAL ACCESS ROAD SECTION

**APPENDIX C
PHOTOGRAPHS**