



**SOUTHERN LABRADOR WASTE
DISPOSAL FACILITY**

**ENVIRONMENTAL ASSESSMENT
REGISTRATION**

Submitted To:

**Government of Newfoundland & Labrador
Department of Environment
Environment Assessment Division
P.O. Box 8700
St John's, NL.
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NAME OF THE UNDERTAKING:

Southern Labrador Waste Disposal Facility

PROPONENT:

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1.0 THE UNDERTAKING

The proposed undertaking involves the development of a parcel of land approximately 6 hectares in size with a 300 meters by 15 meters right of way to accommodate an access road off the Trans Labrador Highway. The site will be developed to facilitate a new regional landfill for the Southern Labrador waste sub-region and to ensure compliance with current environmental standards and the Provincial Waste Management Strategy. The landfill will serve the approximately 4200 residents of the Southern Labrador region.

2.0 DESCRIPTION OF UNDERTAKING

2.1 Geographical Location

The proposed site is located approximately 2.5 kilometers south of the St. Lewis Inlet on the west side of route 510 (Trans Labrador Highway). The approximate coordinates for the site is 52° 22' 52" N and 56° 07' 01" W with a proposed access road extending 300 meters east to intersect route 510 (refer to appendix A).

2.2 Physical Features

The general features of the proposed landfill facility will include the following;

- A cleared and fenced area approximately 250 meters by 240 meters,
- A right of way approximately 15 meters wide by 300 meters long extending from the main landfill area to the Trans Labrador Highway. The access road will be an all season gravel road with a granular maintenance grade topping and security gate to limit access to the site.
- A maintenance/utility building to house a small office, lunchroom, equipment storage and maintenance.
- An area allocated for stockpiling/storage of landfill cover materials (soil).
- Provision for on-site sewage disposal and water supply to service the maintenance/utility building. This would normally be accomplished with the construction of a disposal field/septic tank and a drilled well.
- A landfill area approximately 3 hectares in size and broken up into a number of individual cells.

This project is not at the design stage yet, however a basic concept drawing of a typical landfill site is provided in Appendix B.

The vegetation in the general area of the site is mainly boreal forest type with large spruce, fir and some poplar and birch. This heavy tree cover will provide a visual block from the main highway to the site. Approximately one half of the main site area was cut over at one time and this area is now covered with small tree growth and alders ranging in height from 1 to 2 meters. There are no visible water courses across the site and one

body of water located 300 meters to the south of the site with heavy tree cover between the site and this pond.

2.3 Construction

The proponent anticipates that the first construction activities at the site will begin in the fall of 2014 and involve the legal survey of the site which would include some line cutting for the property boundaries. The main construction on site will start in the spring of 2015 and will involve the removal of vegetation, grubbing of all organic soils, site grading of soil materials and backfilling for road and building construction. The proponent will ensure that all construction activities are contained within the property boundaries of the site and will be committed to keeping the impacts on the surrounding environment to a minimum.

As with any construction project, there are always potential sources of pollutants to the environment. Adherence to permit conditions, contract specifications and application of sound construction practices will protect against the release of pollutants into the environment. Strict monitoring during construction will control activities to minimize risks associated with:

- Silt and sediment
- Dust
- Construction debris
- Risk of fuel, lubricant and hydraulic fluid release
- Airborne emissions from construction equipment
- Noise pollution from construction activities

2.3.1 Mitigation Measures during Construction

The mitigation measures to be taken during construction to reduce environmental impact concerns will include:

- Silt laden runoff from construction areas will not be permitted to discharge directly into any body of water or watercourse. All runoff will be controlled by means of silt fence construction, natural vegetation buffers, stone rip rap, settling ponds and drainage channels as required.
- Efforts will be made to minimize dust generation during the construction phase of the project. Excessive dust from construction activities will be controlled by frequent water or wood chip applications. Any application of calcium chloride will only be allowed in strict accordance with applicable guidelines from the Department of Transportation and Works.
- Solid waste disposal practices will be in compliance with the Environmental Protection Act and associated guidelines. Any construction debris generated

during construction will not be permitted to be disposed of onsite but will have to be stored in proper containers and later disposed of at a municipal solid waste disposal site.

- All machinery will be inspected for leakage of lubricants and/or fuel and must be in good working order. Any accidental spills or leaks will be promptly contained, cleaned up and reported to the 24 hour environmental emergencies report system at 1-800-563-2444.
- All on site fuel handling and storage will be in compliance with *The Storage and Handling of Gasoline and Associated Products Regulations*. Refueling of construction equipment will not be permitted within 30 meters distance to any water body.
- Equipment exhaust systems will be maintained to provide emissions meeting the manufacturer standards for the equipment.
- Exhaust systems will be maintained to ensure noise levels are within the design specifications of the machinery.

2.4 Operation

The Southern Labrador Waste Disposal Facility is expected to begin operation in late 2015 and is being designed for an operational minimum time span of 50 years. Engineering design for the site is not yet completed however the following provides a summary of proposed operations of the facility.

The site will be set up to accommodate a natural attenuation landfill area, a backfill stockpile storage area, an equipment storage/maintenance building with space allocated for recyclable storage/drop-off, outside temporary storage areas for metals, car wrecks, tires and construction demolition materials. A separate secure area will be designated for any hazardous waste materials that are identified and require temporary storage until further shipping to an approved off site environment.

Given the size of the region to be served by this new waste disposal site and the small population a single stream collection process will be used however separation of recyclables by residents will be encouraged and any recyclables dropped off at the new site will be collected for temporary storage.

All vehicles delivering waste to the site will be screened by trained site workers to ensure acceptable waste materials is being off loaded and direction will be given as to location on the site for dumping. The landfill portion of the site will be divided up into smaller areas (cells) which will be developed individually and filled with waste one cell at a time. Each cell when active will have a working face where all waste is dumped to an

approximate depth of 1 meter with a minimum of 300mm of approved backfill cover material being placed on top at least once per week. When each cell reaches the design grade it will be permanently capped with an low permeability layer of material as well as a minimum 300mm of grading and vegetative layer.

The potential sources of pollutants to the environment during operations will consist of those associated with daily transportation, dumping and storage of waste. Strict monitoring and mitigation practices during operation will control these activities and minimize risks associated with the following:

- Silt and sediment
- Dust
- Construction debris
- Risk of fuel, lubricant and hydraulic fluid release
- Airborne emissions from operations equipment
- Noise pollution from daily operation activities
- Scattered debris
- Ground and surface water impacts

2.4.1 Mitigation Measures During Operations

The facility operations will be conducted in such a manner as to protect public health and safety, minimize fire hazard potential, does not create a nuisance or eye sore to adjacent properties, and will not contaminate ground or surface waters off site. The mitigation measures previously outlined for construction equipment use and silt/sediment control will be adopted during operations of the facility. In addition the following measures will be undertaken during normal operations of the site in order to minimize potential environmental impacts:

- All vehicles delivering waste to the site will be monitored for acceptable waste material and to ensure all dumping is at approved designated areas on site.
- Public access to the site will be controlled by site employees and secure fencing/gate.
- Any identified hazardous waste received at the site will be properly segregated and stored until removed from the site by a licensed contractor to an approved facility.
- An active animal, rodent and vector control program will be put in place.
- Loose debris and litter will be addressed with an appropriate program in place to include regular litter collection, covering of all loads, debris control fencing and other measures as required.
- Develop a fire safety program in consultation with local fire departments and the Department of Forest Resources and Agri-Foods.
- Surface water control measures will be implemented to minimize the impact on the environment from the operation procedures. Perimeter and intercept ditching to be installed to divert water from areas of sediment and to separate surface water

from placed waste to minimize leachate generation. Low permeability backfill cover material will be used to limit infiltration into waste materials.

2.4.2 Resource Conflicts

There are no anticipated resource conflicts with the operations of the proposed facility. There were no water bodies or water courses identified on the site or within 300 meters of the site and given the previously noted mitigation measures to prevent sediment and deleterious materials releasing into the environment there should be no impact on fish or fish habitat. All operations activity will be confined to within the fenced boundaries of the property and will therefore have no impact on surrounding forestry, wildlife or any outside human activities.

2.5 Occupation

The Labrador Straits Waste Disposal Inc. offers an equal employment opportunity, free of gender and age specific qualifications. It is anticipated that during the construction phase of the project the workforce will consist of the following:

National Occupations Classification Group	Anticipated Number of Positions	Description
0711	1	Construction Manager
2154	2	Surveyors
7217	4	Contractors & Supervisors – Heavy Construction
7219	4	Contractors & Supervisors Other Construction
7241	1	Electrician
7411	4	Truck Drivers
7412	2	Heavy Equip. Operators
7611	2	Construction Trades Helpers & Labourers
2264	1	Health & Safety Inspectors

During operations of the facility the anticipated workforce will consist of the following:

National Occupations Classification Group	Anticipated Number of Positions	Description
1211	1 - (Part Time)	General office and Administration Support
7421	1	Site Attendant & Operator
7411	2 – (Half Time)	Truck Drivers

2.6 Project Related Documents

To date, there are several project related documents that have been generated for the proponent. These documents are listed below:

- H.T. Kendell & Associates, 2002. Solid Waste Management Plan for the Straits Region.
- AMEC Earth & Environmental Limited, 2003. Draft Report – Regional Solid Waste Management Study for The Southeastern Region of Labrador. Phase I Preliminary Review.
- AMEC Earth & Environmental Limited, 2004. Final Report – Regional Solid Waste Management Study for Southeastern Labrador. Phase 2
- Hatch Mott MacDonald Limited, 2010. Draft Report – Southern Labrador Waste Management Study. Issued for Review.

3.0 APPROVAL OF THE UNDERTAKING

Prior to construction and operations of the facility the permits, approvals and authorizations that may be necessary for the undertaking include:

Permit, Authorization & Approval	Governing Body
PROVINCIAL	
Release from the Environmental Assessment Process	Government of Newfoundland & Labrador Department of Environment and Labour, Environmental Assessment 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

**SOUTHERN LABRADOR WASTE DISPOSAL FACILITY
ENVIRONMENTAL ASSESSMENT REGISTRATION**

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
<ul style="list-style-type: none"> - Building Accessibility Design Registration - Electrical permit - On-site sewage disposal approval 	Government of Newfoundland & Labrador Department of Government Services, 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 first work activities for this site will be the legal site survey and any pre-design site investigation required which is scheduled for the fall of 2014. 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 spring of 2015 with anticipated construction completion by the fall of 2015.

5.0 FUNDING

Funding for the project is expected to be through various government sources and the capital cost for construction of the site and facility is estimated to be \$1,500,000.

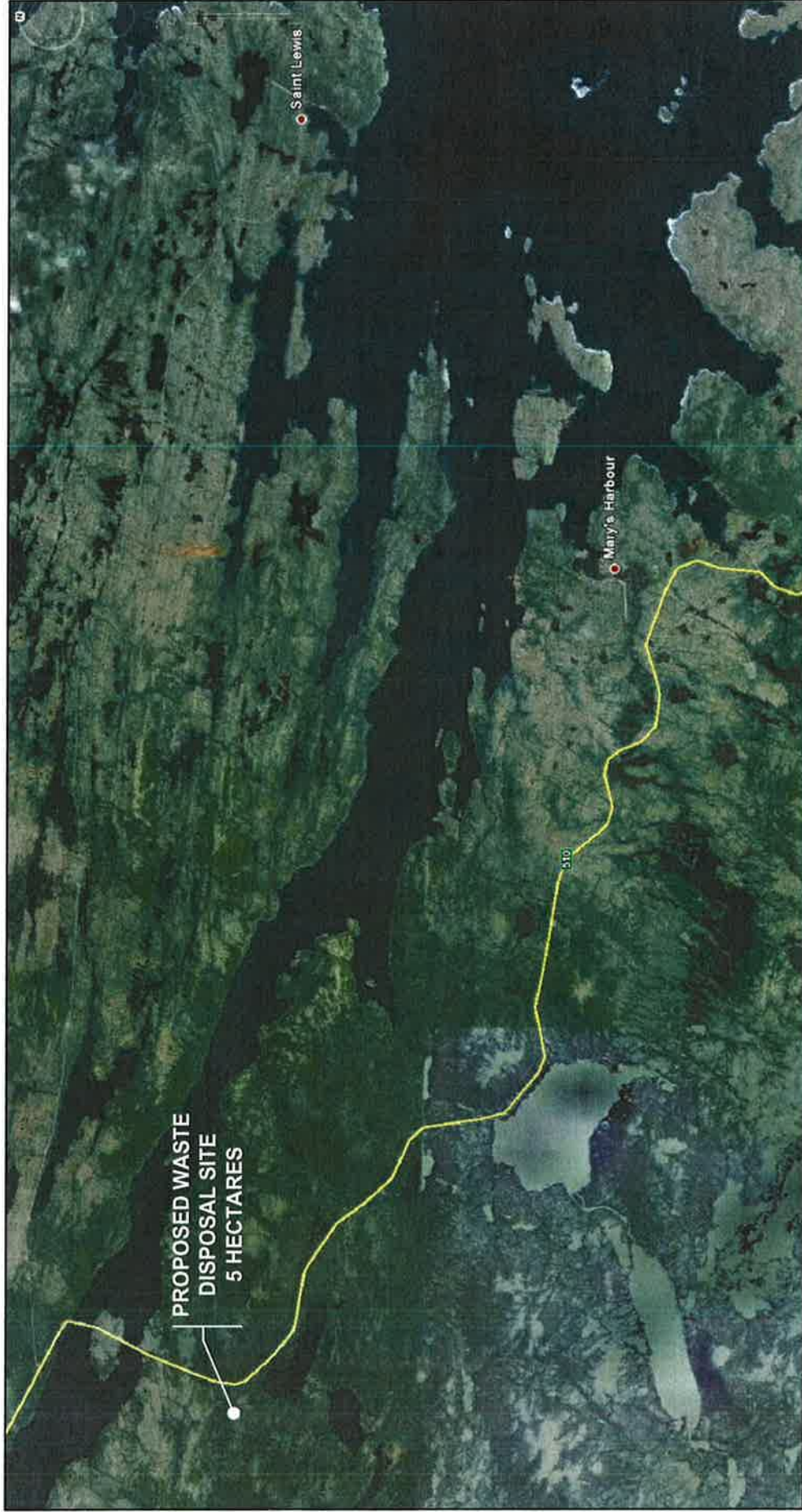


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September 3, 2014

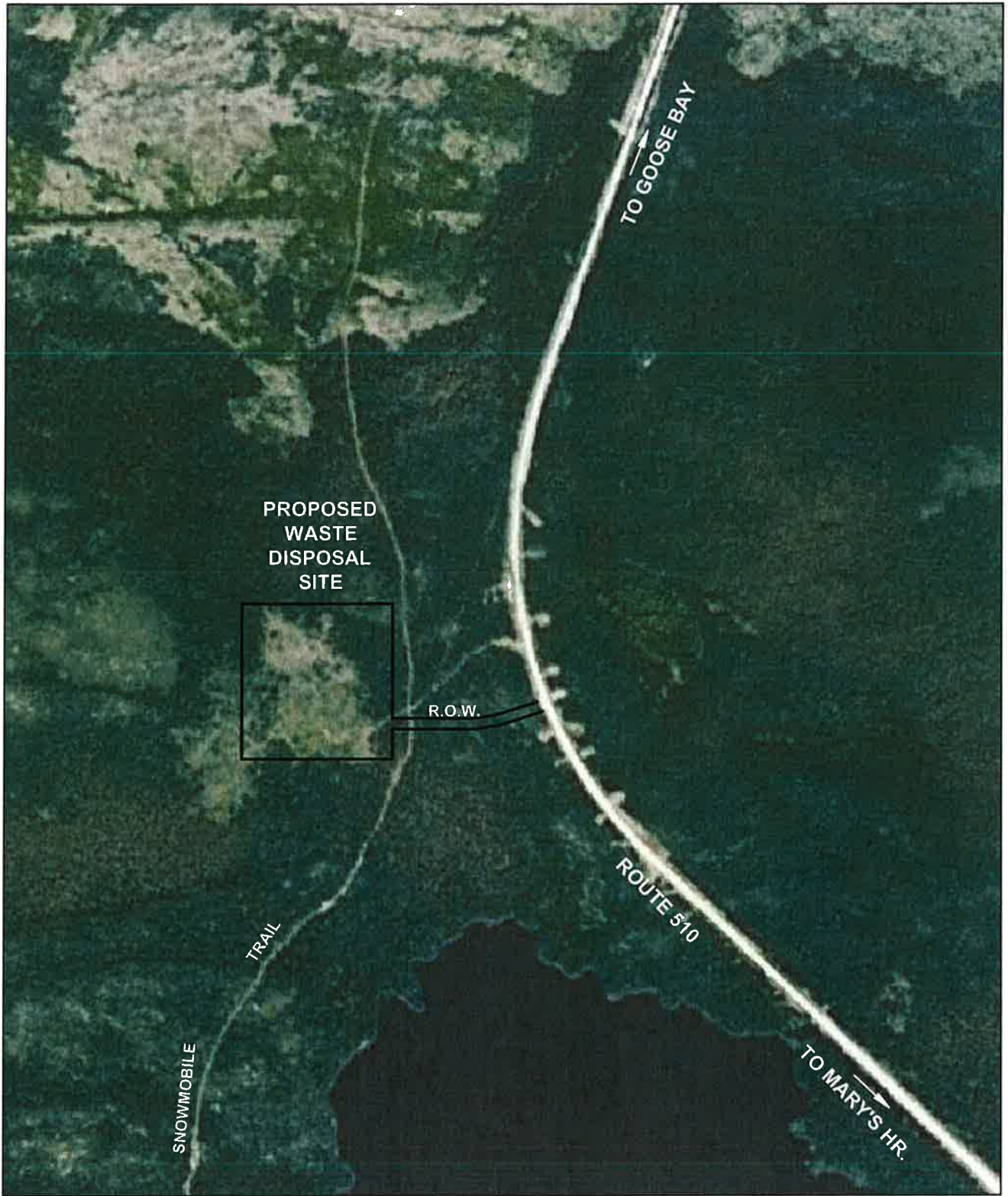
APPENDIX A

SITE AND LOCATION PLANS



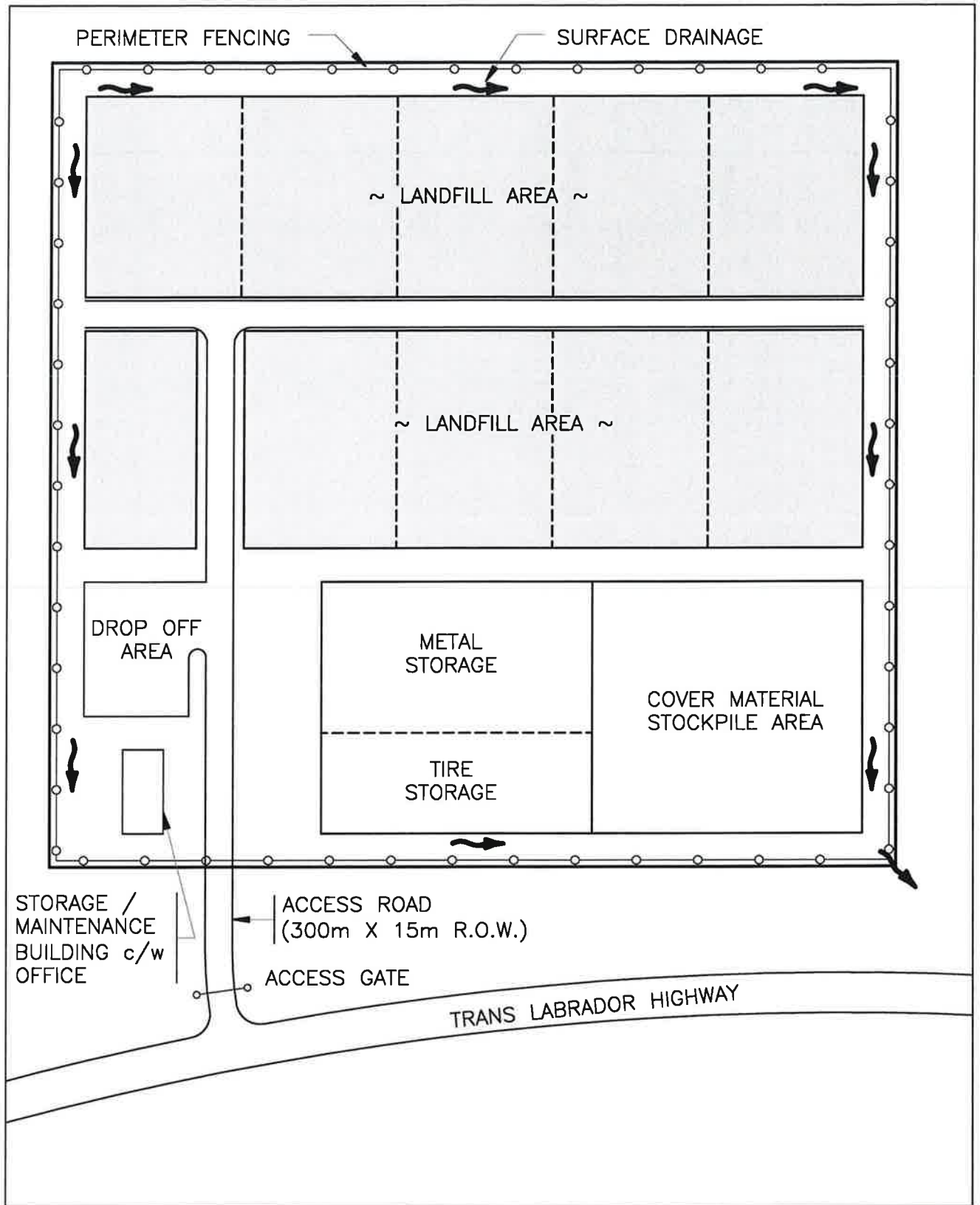
LABRADOR STRAITS WASTE DISPOSAL INC.
SOUTHERN LABRADOR WASTE DISPOSAL FACILITY
LOCATION PLAN





APPENDIX B

SITE CONCEPT PLAN



APPENDIX C

PHOTOGRAPHS



Photo No.1 – Looking from East to West across property



Photo No. 2 – Looking Northwest across site. Note remnants of trailer mounted shed.



Photo No. 3 – Looking Northeast towards previous access route to cut out area



Photo No. 4 – View of snowmobile trail adjacent to proposed site which is to the left in photo



Photo No. 5 – Looking South along Trans Labrador Highway with proposed site to the right. Note heavy tree cover.



Photo No. 6 – Looking North along Trans Labrador Highway with proposed site to left. Note heavy tree cover.