

**Glenfair Farms Ltd.  
Woodale  
Newfoundland**

**Registration of an Undertaking  
Pursuant to the Environmental Protection Act**

Prepared By:

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**EECL # 9-119**

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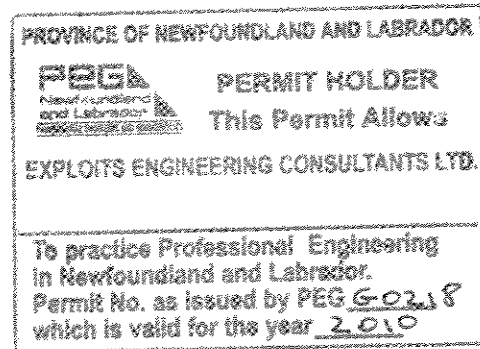
January 2010

NAME OF UNDERTAKING:

GLENFAIR FARMS CRANBERRY  
& FORAGE FARM DEVELOPMENT

PROPONENT:

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## **The Undertaking:**

Art Gill of Woodale, Newfoundland and Labrador is planning to develop and operate a Cranberry and Forage operation on eighty eight (88) hectares of peat land now under application from Crown Lands Division of Department of Natural Resources.

## **Description of the Undertaking:**

### **(1) Geographical Location**

The peat bog under application is located in the Woodale north area approximately five (5) km north or northeast of Jewer's Brook that drains into Peter's Arm River in the east end of Woodale. The site is located about eleven (11) km from the New Bay Road. This peat bog is under Application # 133798 dated May 4, 2009. Total bog area is approximately eighty eight (88) hectares – map is attached.

### **(2) Physical Features:**

The site is totally peat bog. No draining or ditching has been done. It is completely surrounded by Crown Land on the north, south, east and west. A recently installed waterline servicing the towns of Botwood and Peterview from the Northern Arm Lake water supply runs by the south side of this bog. The development of this bog is for cranberry and forage production and will not have any consequences on the water line. The area is considered to be a dome bog sloping north on one side toward Northern Arm River for about a one thousand, two hundred and seventy three (1,273) meter distance and sloping south on the opposite side toward Peter's Arm River for a distance of seven hundred and sixty two (762) meters. The bog is situated in a general northeast/southwest direction – map is attached.

### **(3) Construction**

The site will be designed by an appropriate engineering consultant and in consultation with agricultural staff. Work will be carried out over a period of two to five (2 to 5) years with approximately a 4 hectare cranberry field and a 4 hectare forage field developed by 2010 and additional amounts each year thereafter. The actual size of the fields will be determined by engineering advice.

#### **i. Cranberry Operations:**

- cranberry fields will be developed by removing top layer of vegetation and peat to be used to form berms around the field;
- irrigation pond for water storage;
- sediment pond for holding discharge water;

- installation of water control structures;
- installation of drainage tile in cranberry bed;
- berms around fields will be developed into roads approximately 1.8 to 2.4 meters wide to service area;
- approximately twenty (20) cm (6" to 8") of sand to be laid over cranberry bed.

ii. Forage Field Operations:

- forage fields to be ditched by Dondi Ditcher and the water drained into irrigation ponds for cranberry production and/or irrigating forage fields;
- rotovator shredder to be used to shred vegetation on peat bog;
- leveling bog to prepare for forage production; limestone to be applied to neutralize acidity to improve forage production.

Possible sources of pollution would come from machinery working with both cranberry and forage development. Diesel fuel and lubricants used in the operation of excavators, farm tractors, dump trucks, etc. Fueling and servicing will not be done on the actual job site but at a specified site off the bog where conditions can be strictly controlled. No fuels or lubricants will be stored on site. These products will be transported to the site from our home base at Woodale, approximately ten (10) km away. There would appear to be no cause for resource conflicts.

**(4) Operations:**

Management and production of cranberry will be ongoing yearly. After preparation of the beds seedlings will be transplanted and allowed to produce. To harvest, the bed is flooded with about forty to forty five (40 – 45) cm of water, berries are dislodged from the plant by a “cranberry beater”, gathered by a boom and loaded in containers by a conveyor system for shipment.

Water supply will be drawn from an irrigation pond that will be dug out of the existing peat bog and within the confines of the property boundaries. Typically, these ponds rely on the natural water table that exists, as is the case here. The size and depth of the irrigation pond will depend on the development of the cranberry fields and will increase as development increases. Water will be drawn from the irrigation pond using a diesel pump. This water is then distributed to an irrigation network of HDPE piping to irrigate or flood the cranberry beds. At this time there is no intent to draw water from any streams.

Typically, irrigation operations allow waste water to free flow through the site. Harvesting requires that one cranberry bed is flooded at a time with subsequent beds flooded using the previous flood water and top up water if necessary. Significant draw down of water occurs during the winter when all fields are flooded to protect plants from frost damage.

With all water usage operations there is a need to discharge excess water. The excess water is discharged through a series of ditching around each of the cranberry beds and control structures at entry and exit locations for each bed, therefore, the amount of discharge can be managed. The flood water is then drained to the next field through a controlled drainage system for similar harvesting or drained into a sediment pond to be used later as required. During the construction phase silt fences will be used to mitigate sediment discharge. The discharged water will be released into a settlement or tail water recovery pond that will be constructed within the confines of the property boundary. This pond will be at the low end of the peat bog to allow for gravity flow. The exact location will be determined once a topographical survey is completed. The tail water recovery pond will be outfitted with a spill way structure to allow for the release of the water in a less damaging way. The layout of the entire cranberry operation depends largely on the topographical survey which has yet to be conducted.

Agriculture operational procedures will meet appropriate environmental standards for sustainable agriculture.

During the operational period potential contaminants will include chemicals used in the cranberry operation within Newfoundland and Labrador and could include registered products for:

- Hericides; Devrinol Callisto, Roundup
- Insecticides; Sevein, Diazinon
- Fungicides; Bravo, Furban
- Fertilizer; 17-17-17 / 50 lbs/acre, 46-0-0 / 10 lbs/acre

Operational sources of pollution would be pretty much the same as for construction, no fuels or lubricants will be stored on site. Refueling and servicing will be done at a controlled site off bog with supplies transported from home base on a daily basis or on an "as needed" basis.

No buildings will be constructed in the area. Refuse and human waste will be disposed of as per regulations of the Department of Environment and Conservation. The intension is to provide an outhouse enclosure complete with portable facilities that can be disposed of into the Town of Grand Falls-Windsor's sanitary system.

**Forage Production:** Upon completion of construction of fields for forage production, quantities of fertilizer and limestone will be applied and cultivated in the soil and seeded. Fertilizer and lime applications will be determined by soil samples and recommendations from the Soils and Plants Lab in St. John's. Harvesting is done by farm tractors and mowers equipped with four wheel drive and extra flotation tires for bog operations. Forage is then baled and wrapped

with plastic for preservation by similar type equipment and transported to home base to be used as livestock feed. Few, if any, pesticides will be used in the production of forage, reducing the risk of pollution. Fuel and lubricants for machinery operation will not be stored on site but will be transported daily or on an “as needed” basis from home base.

**(5) Occupations:**

Glenfair Farms Cranberry Farm Woodale North #1447

<b>Occupation</b>	<b>NOC</b>	<b>Full/Part-time</b>	<b>Length</b>	<b>Number of Personnel</b>
General Manager	8251	Full-time	8 months	1
Design Engineer	2131	Full-time	1 week	1
Grower	8431	Full-time	6 months	1
Pesticide Applicator	8431	Full-time	2 weeks	1
Labourer	8431	Part-time	6 months	3
Excavator Operator	7421	Full-time	6 weeks during development	1
Electrician	7241	Full-time	1 week	1
Mechanic	7312	Full-time	3 weeks	1

Crown Lands Referral #133798

**(6) Project Related Documents**

Crown Land Application # 133798, May 4, 2009

**Approval of Undertaking:**

The following is a list of main permits, licenses and approvals required for this project:

<b><u>Approval / Certification / License / Permit</u></b>	<b><u>Authority</u></b>
Environmental Registration	Dept. of Environment & Conservation
Environmental Assessment Approval	Dept. of Environment & Conservation
Crown Land	Dept. of Environment & Conservation (received)
Fuel Storage & Handling	Dept. of Government Services (received)
Pesticides (applicator/operator)	Dept. of Environment & Conservation (received)
Water Use and License	Dept. of Environment & Conservation
Permit to Alter a Body of Water	Dept. of Environment & Conservation
Workers Health & Safety Compensation	Workplace Health, Safety and Compensation Commission

**Schedule:**

The earliest construction start date is July 2010, the latest being September 2010. Construction will then be conducted over two years.

**Funding:**

No application for funding at this time. Typical cost of cranberry bed development is approximately \$30,000 - \$35,000 / acre. The cost of forage development is approximately \$5,000 / acre.

\_\_\_\_\_

Date

\_\_\_\_\_

Art Gill (Owner/Operator)

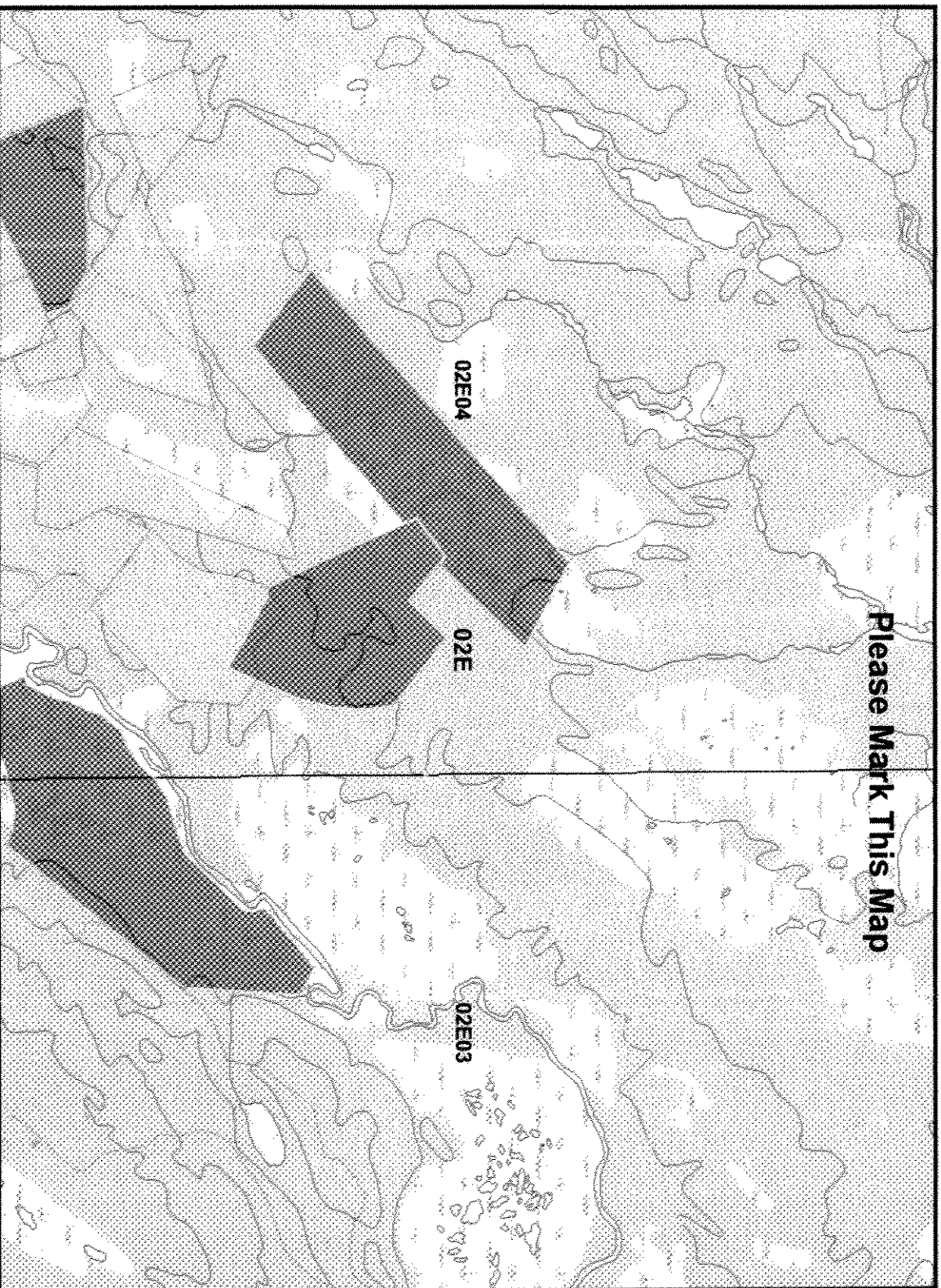


# MAPPING

Government of Newfoundland & Labrador  
 Department of Environment & Conservation



**Please Mark This Map**



**NOTE TO USERS**

The information on this map was compiled from land surveys registered in the Crown Lands Registry.

Since the Registry does not contain information on all land ownership within the Province, the information depicted cannot be considered complete.

The boundary lines shown are intended to be used as an index to land titles issued by the Crown. The accuracy of the plot is not sufficient for measurement purposes and does not guarantee title.

Users finding any errors or omissions on this map sheet are asked to contact the Crown Titles Mapping Section, Howley Building Higgins Line St. John's Newfoundland.

Users finding error or omissions can contact the Crown Titles Mapping Section by telephone at 729-0361. Some titles may not be plotted due to Crown Lands volumes missing from the Crown Lands registry or not plotted due to insufficient survey information.

The User hereby indemnifies and saves harmless the Minister, his officers, employees and agents from and against all claims, demands, liabilities, actions or cause of actions alleging any loss, injury, damages and matter (including claims or demands for any violation of copyright or intellectual property) arising out of any missing or incomplete Crown Land titles, and the Minister, his or her officers, employees and agents shall not be liable for any loss of profits or contracts or any other loss of any kind as a result.

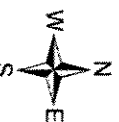
**For inquiries please contact a Regional Lands Office.**

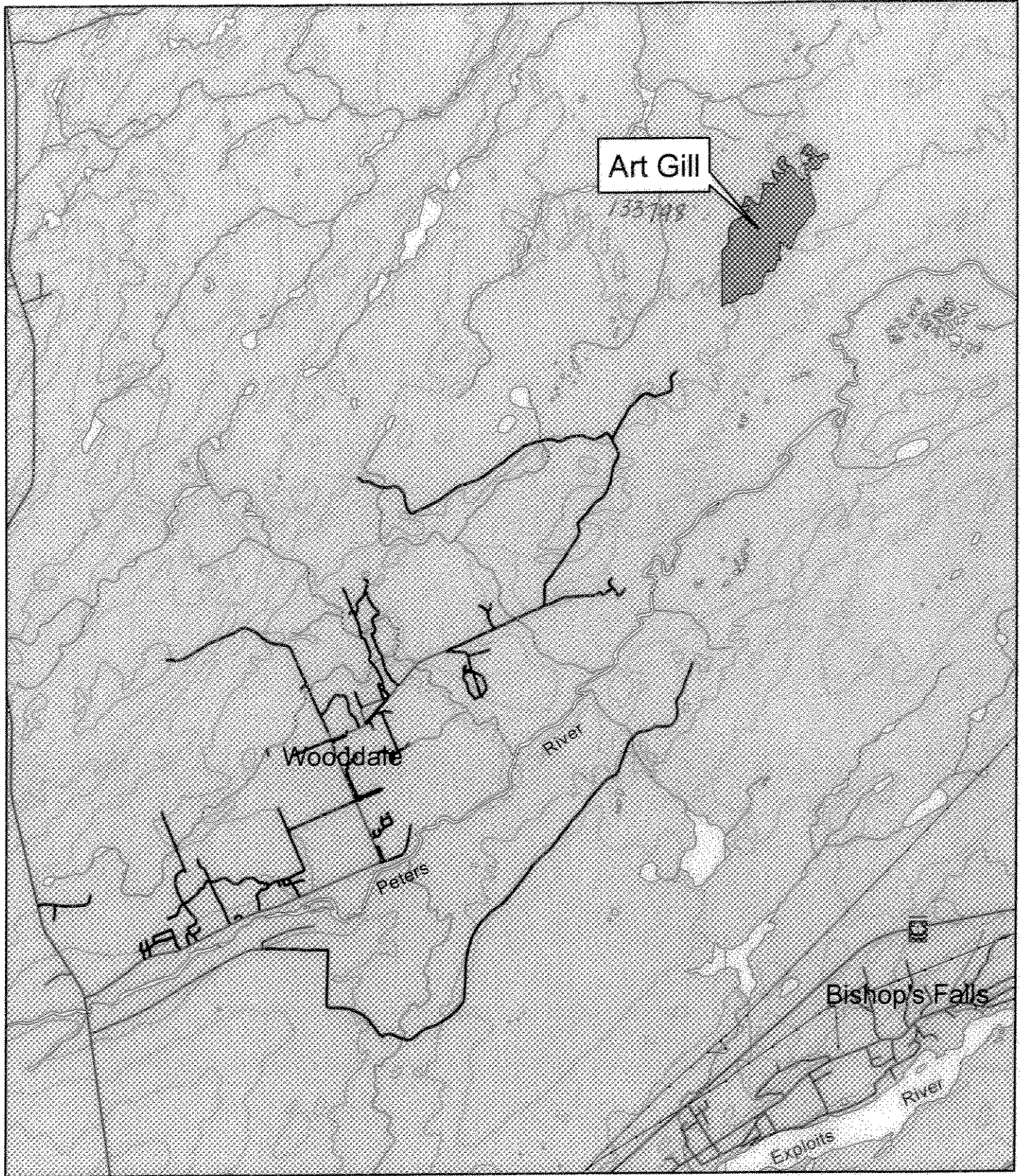
- Gander - 256-1400
- Clarenville - 466-4074
- St. John's - 729-2654
- Goose Bay - 896-2488
- Corner Brook - 637-2387

Crown Lands Division

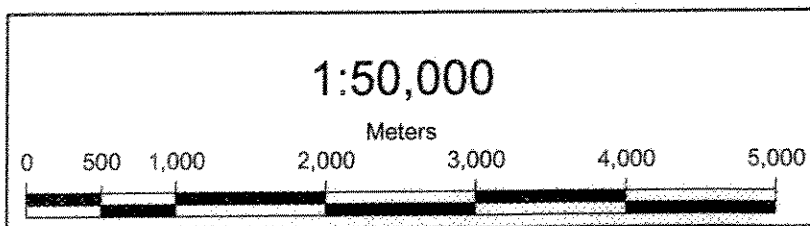
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Compiled on Mar 31, 2009





NTS Mapsheet 2E3 / 2E4

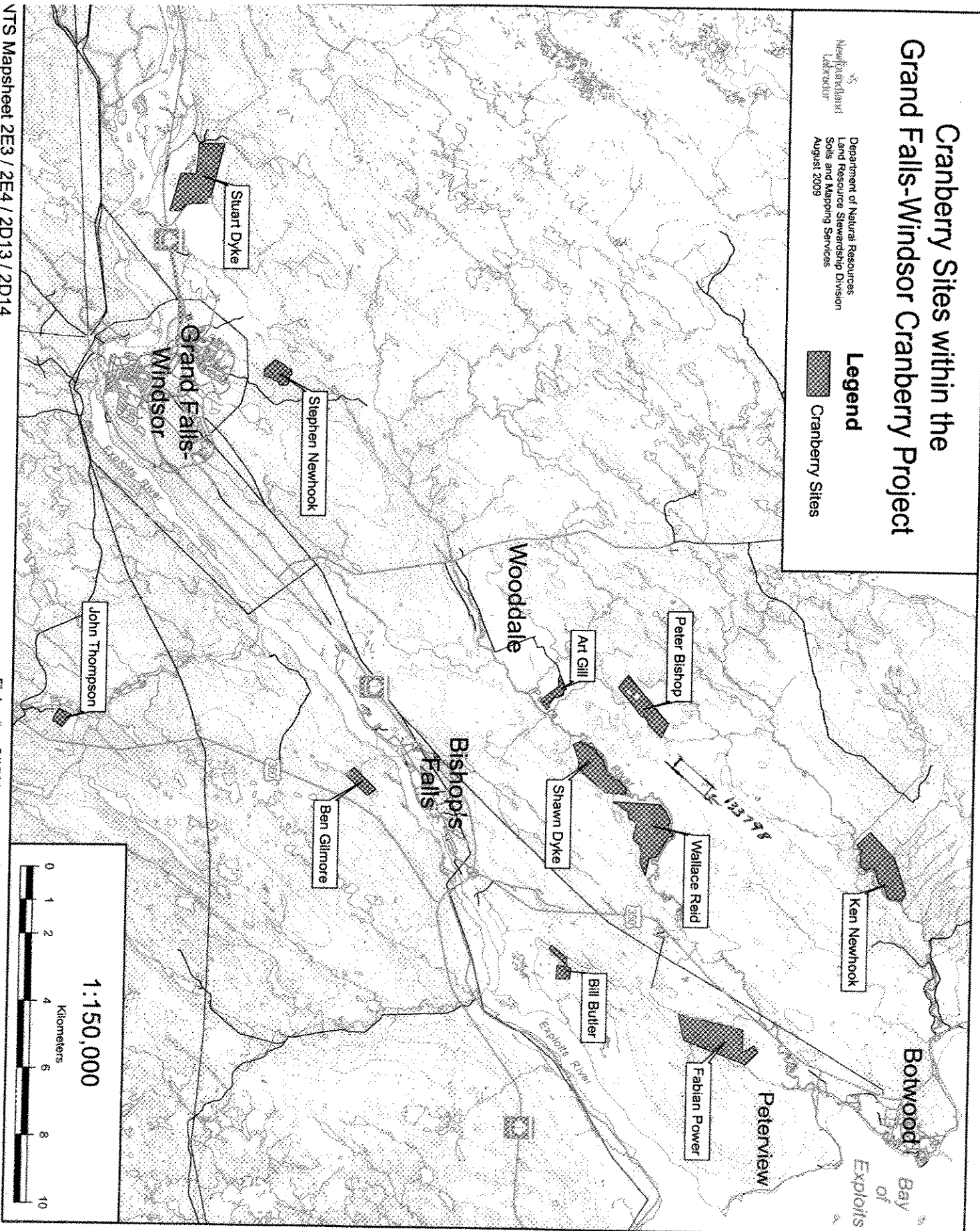


Location Map

# Cranberry Sites within the Grand Falls-Windsor Cranberry Project

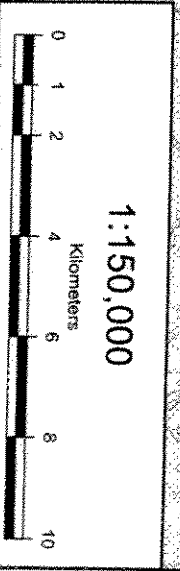
Mapping and  
 Land Resource  
 Stewardship Division  
 Soils and Mapping Services  
 August 2009

**Legend**  
 Cranberry Sites



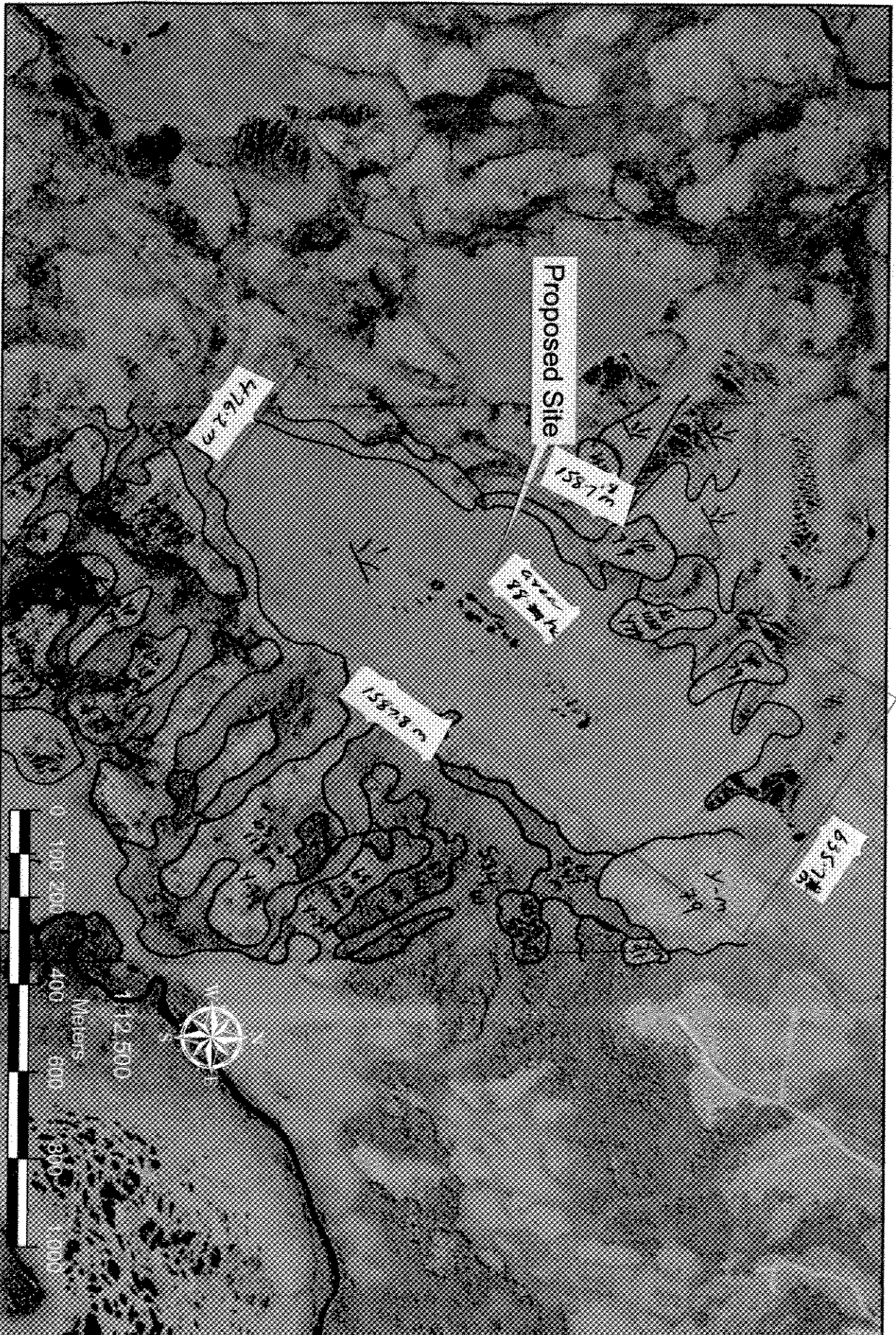
NTS Mapsheet 2E3 / 2E4 / 2D13 / 2D14

File Location: G:\RS\_Landuse\Project\_Files\Provincial\Commodity\Cranberry\Applications\All\_GrandfallsArea.mxd



# **AERIAL PHOTO**

# Site Location Art Gill



**General Manager (NOC Code 8251):**

Farmers and farm managers perform some or all of the following duties:

- manage the overall operations of a farm, ranch or orchard;
- determine the amount and kinds of crops to be grown and livestock to be raised;
- plant, cultivate and harvest crops;
- raise and breed livestock and poultry;
- hire and supervise farm workers;
- establish a marketing program;
- purchase farm machinery, livestock, seed, feed and other supplies;
- maintain farm machinery, equipment and buildings
- develop and keep financial and production records;
- farmers and farm managers may manage farms specialized in particular crops such as wheat, apples or potatoes or raise particular livestock such as beef cattle, hogs or chickens.

**Design Engineer – Contractor (NOC Code 2131):**

- assuming civil engineer;
- plan and design major civil projects such as buildings, roads, bridges, dams, water and waste management systems and structural steel fabrications;
- develop construction specifications and procedures;
- evaluate and recommend appropriate building and construction materials;
- interpret, review and approve survey and civil design work;
- conduct field services for civil works;
- ensure construction plans meet guidelines and specifications of building codes and other regulations;
- establish and monitor construction work schedules.

**Grower (NOC Code 8431 General Farm Workers):**

General farm workers perform some or all of the following duties:

- plant, fertilize, cultivate, spray, irrigate and harvest crops;
- feed and tend livestock and poultry;
- operate and maintain farm machinery and equipment;
- detect disease and health problems in crops, livestock and poultry;
- examine produce for quality and prepare for market;
- set and monitor water lines, air flow and temperature in barns, pens and chicken coops;
- general farm workers can become specialized in a particular type of crop or livestock production through experience.

**Pesticide Applicator (NOC Code 8431 General Farm Workers):**

- plant, fertilize, cultivate, spray, irrigate and harvest crops.

**Labourer (NOC Code 8431 General Farm Workers):**

General farm workers perform some or all of the following duties:

- plant, fertilize, cultivate, spray, irrigate and harvest crops;
- feed and tend livestock and poultry;
- milk cows;
- operate and maintain farm machinery and equipment;
- detect disease and health problems in crops, livestock and poultry;
- examine produce for quality and prepare for market;
- set and monitor water lines, air flow and temperature in barns, pens and chicken coops;
- clean stables, barns, barnyards and pens;
- general farm workers can become specialized in a particular type of crop or livestock production through experience.

**Excavator Operator (NOC Code 7421 Heavy Equipment Operators):**

Heavy equipment operators perform some or all of the following duties:

- operate heavy equipment such as backhoes, bulldozers, loaders and graders to excavate, move, load and grade earth, rock, gravel or other materials during construction and related activities;
- operate bulldozers or other heavy equipment to clear brush and stumps prior to logging activities and to build roads at logging and surface mining sites;
- operate heavy equipment with pile driver head to drive piling into earth to provide support for buildings, bridges or other structures.

**Electrician (NOC Code 7241 Electricians)**

Electricians in this unit group perform some or all of the following duties:

- read and interpret drawings, circuit diagrams and electrical code specifications to determine wiring layouts for new or existing installations;
- pull wire through conduits and through holes in walls and floors;
- install brackets and hangers to support electrical equipment;
- install, replace and repair lighting fixtures and electrical control and distribution equipment, such as switches, relays and circuit breaker panels;
- splice, join and connect wire to fixtures and components to form circuits; test continuity of circuits using test equipment to ensure compatibility and safety or system, following installation, replacement or repair.



## **Mechanic (NOC Code 7312 Heavy-Duty Equipment Mechanics):**

Farm equipment mechanic

Heavy-duty equipment mechanics perform some or all of the following duties:

- check bulldozers, cranes, graders and other heavy construction, agricultural, logging and mining equipment for proper performance and inspect equipment to detect faults and malfunctions;
- diagnose faults or malfunctions using computerized and other testing equipment to determine extent of repair required;
- adjust equipment and repair or replace defective parts, components or systems, using hand and power tools;
- test repaired equipment for proper performance and to ensure that work meets manufacturer's specifications;
- clean, lubricate and perform other routine maintenance work on equipment;
- service attachments and working tools such as harvesting and tillage equipment, blades, ploughs, winches and side booms;
- may perform repair work on heavy trucks;
- may attach components and adjust new farm equipment.

**PROPOSED CRANBERRY  
FARM LAYOUT**  
(preliminary)