



**SNC • LAVALIN**

## PROJECT REGISTRATION

In Accordance with the Requirements of Newfoundland and  
Labrador Environmental Protection Act.

For

The Rattles Golf and Country Club



**Project No.: 723137**

**July 2009**



Certified  
**ISO**  
**9001**

**PROPOSED  
THE RATTLES GOLF AND COUNTRY CLUB**

**Environmental Registration Document**

**JULY 2009  
Project #:723137**

**1. NAME OF THE UNDERTAKING**

THE RATTLES GOLF AND COUNTRY CLUB

**2. PROPONENT**

**2.1. Name of Corporate Body**

The Rattles Golf and Country Club (Brad Baker and James Baker)

**2.2. Address**

Eveley's Lane  
P.O. Box 254  
Victoria, Newfoundland  
A0A 4G0

**2.3. Contact**

Name: Brad and James Baker  
Official Title: Proponents  
Telephone #: (709) 596-8475

**2.4. Principal Contact Person for Purposes of Environmental Registration**

Rennie Hynes  
BAE ♦ Newplan Group Limited  
1133 Topsail Road  
Mount Pearl, NF  
A1N 5G2

Telephone #: (709) 368-0118  
Fax #: (709) 368-3541

### **3. THE UNDERTAKING**

#### **3.1. Nature of the Undertaking**

It is proposed to develop an eighteen-hole golf course in Victoria, which is located on the west coast of the Avalon Peninsula, Newfoundland (See Figure 1). The development will consist of a practice range and practice green, pro shop and clubhouse, paved parking lot, eighteen holes, paved cart paths, an irrigation system, water and sewer line construction and a maintenance/administration facility. Future development will include either the construction of rental units (Plan One) or the construction of an additional 9 holes (Plan Two). An existing road will provide site access. A portion of the site is currently owned by the proponent (12 acres) and an application to Crown Lands has been submitted for the remaining 250 acres. The entire undertaking is to be carried out in three phases over an eight-year period.

A layout of the golf course is provided as Figure 2.

#### **3.2. Need for the Undertaking**

In comparison to other provinces in Atlantic Canada, golf is an underserved market in Newfoundland. According to Golf Newfoundland and Labrador, there are presently 20 available golf facilities in Newfoundland and Labrador, with some of the largest being Clovelly Trails, which has 36 holes, Terra Nova Golf Resort located in Port Blandford, which has 27 holes, and Pippy Park Public Golf Course, which also has 27 holes. With the exception of Pitchers Pond Golf Course (9 hole course located on the eastern shores of Trinity Bay), all existing golf courses on the Avalon Peninsula are geographically located east of Salmonier Line. The Rattles Golf and Country Club would be servicing the Avalon Peninsula, specifically the Conception Bay North and South areas, along with local and tourist markets.

### **4. DESCRIPTION OF THE UNDERTAKING**

#### **4.1. Location**

The Rattles Golf and Country Club will be located in Victoria, NL. A small community located on the west side of Conception Bay on the Avalon Peninsula (see Figure 1). The proposed property is bounded to the south by Church Road and to the north by Route 74. Seal Pond is located to the north of the site, between the property boundary and Route 74. Rattles Road is located to the east of the site and extends onto the site.

Victoria is located at the intersection of Route 70 and 74 and is part of the Baccalieu Trail (a popular tourist destination). Travel distances to major communities are: Carbonear 5 km; Bay Roberts 29 km; Whitbourne 65 km; Clarenville 162 km; Marystown 277 km; Gander 306 km and St. John's 119 km.

## **4.2. Physical Features**

### **4.2.1. Access**

Access to the golf course will be off of Route 74, through property currently owned by the proponent. The gravel access road will extend to a gravel parking lot that will accommodate approximately 200 vehicles. Double Brook will require the placement of a culvert to allow access to the site.

### **4.2.2. Land Contours**

#### 1) Site Character

The golf course setting is characteristic to the geographic conditions of the area. The development is to take place on the proposed 250 acres of crown land as well as the 12 acres of land that is currently owned by the proponent along Route 74.

Rattles Road is located to the east of the site and extends onto the proposed footprint. According to mapping, one watercourse (Clarks Brook) originates from marshland on the site and flows southeast off the site. Another watercourse (Double Brook) flows from Seal Pond, through the portion of the site currently owned by the proponent and connects with Clarks Brook to the southeast of the Town of Victoria. Based on the land contours, it appears that groundwater flows in a southeast direction.

The site has a variety of landscape elements, such as small hills, bogs and a boreal forest covering the majority of the site. A portion of Rattles Road, and a pole line will be encompassed within the development. See Figure 2.

#### 2) Topography

The land within the golf course footprint is sloping gently to the southeast. The northwest portion of the site is approximately 137 m above sea level and the southeast portion is at 107 m above sea level.

There are no large hills or non-uniform topography on the proposed property. Forested and marshland areas make up the majority of the site. A small elevation change is expected in the area of Clarks Brook and Double Brook, on the southeast and east portions of the site.

A hilly area with an elevation up to 213 m above sea level is located to the north and northwest of the proposed site. The Town of Victoria is located to the south and southeast of the site.

#### **4.2.3. Soils**

According to the Surficial Geology of Insular Newfoundland, Department of Mines and Energy, Government of Newfoundland and Labrador, the surficial geology consists of till veneer. This is typically thin (<1.5 m), discontinuous, poorly sorted sediment containing a mixture of grain sizes from clay to boulders, overlying bedrock and patches of exposed bedrock. Soil in this area generally contains between 20 – 90 % sand size grains or finer and 80 – 10 % greater than sand size grains.

#### **4.2.4. Vegetation**

The vegetation on the site is typical to the area and is part of what is known as the maritime barrens, northeastern barrens subregion. This subregion has lower fog frequency and somewhat warmer summers compared to subregions B and C. Arctic-alpine species are absent from the heath vegetation and Yellow Birch is absent from the forest. The landscape is extensively forested with local heath vegetation particularly along the coast.

The tills in the area are generally a shallow rolling ground moraine with sandy loam-to-loam texture. The Hylocomium-Balsam Fir type occupies mid-slopes and it is usually associated with gleyed podzols or gleysols.

Portions of the site have been cleared of trees over the years for other developments including a pole line, two gravel roads, ATV trails and an area at the end of Rattles Road (See Figure 2).

#### **4.2.5. Drainage**

Twenty-three meters of 1500 mm galvanized culvert is proposed to accommodate water flow from Double Brook, freeze and thaw as well as storm water, and accommodate traffic entering the facility.

The dense turf grass cover throughout the golf course will regulate the infiltration and percolation rates of water into and through the soil. Irrigation and adequate drainage systems will be installed within the golf courses fairways and greens to accommodate the facilities.

#### **4.2.6. Environmentally Sensitive Zones**

Two environmentally sensitive zones on site include Clarks Brook and Double Brook that are located on the southeast and east portions of the site, respectively. According to mapping, it appears that Clarks Brook originates on the property, likely from marshland and Double Brook originates from Seal Pond.

It is expected that proper construction scheduling and the use of environmentally sensitive barriers will mitigate the construction effects.

#### **4.2.7. Adjacent Former Landfill**

According to site mapping, there is a former landfill located adjacent to the proposed site footprint. According to representatives from the town of Victoria, the landfill was permitted for one time use and used for disposal of vehicles only. The location of the former landfill is shown on Figure 2.

#### **4.2.8. Maintenance/Administration Building**

A combined maintenance and administration building will be constructed as part of the undertaking. The building is proposed to be located either in the north of the property, adjacent to tee #15 or towards the south of the driving range (See figure 2). The building will be used to store maintenance equipment and golf carts. A concrete pad will be constructed adjacent to the building for fueling of any equipment used on site during operations (i.e. lawn mowers). The size of the building is approximately 625 m<sup>2</sup>.

#### **4.2.9. Pro Shop and Clubhouse**

A combined pro shop and clubhouse will be constructed as part of the undertaking. The proposed location is to the southwest of the entrance and parking lot. The size of the building will be approximately 1250 m<sup>2</sup>.

#### **4.2.10. Driving Range and Practice Green**

A 100 m long and 300 m wide driving range will be constructed. A practice green 75 m x 75 m will also be constructed near the clubhouse.

#### **4.2.11. Course Construction**

An approximate 150-acre area will be required for the eighteen (18) holes. The course features will include green construction, tee construction and fairways for 18 holes, as well as hazards (i.e. traps and ponds) and paved cart paths. The course will also include an in-ground, automated irrigation system; drainage system and a power transmission line to service the pump house, pro shop and clubhouse building and maintenance/administration building.

#### **4.2.12. Hydrology**

There are no ponds or lakes within the proposed golf course property; however, there are two watercourses (Clarks Brook and Double Brook) that are located on the southeast and east portions of the property. Double Brook will be culverted for access to the golf course and Clarks Brook will require a bridge for construction of Hole #4. Mapping provided by the Department of Environment (1:50,000) does not show any other watercourses on the property; however, there may be some other small streams that would require bridge-crossings on the golf course.

#### **4.2.13. Irrigation System**

Irrigation is proposed using two man-made irrigation ponds to be located near the driving range (See Figure 2). Backup irrigation will also be established using Seal Pond, located just outside the property boundary, to the north.

The golf course will have a contemporary in-ground irrigation system. It will consist of a single row system down the center of the golf course with sprinklers spraying over an approximately 27.5 m radius and smaller 18.2 m radius for the tees and greens. The water will be pumped through PVC pipe buried in the ground. Pipe sizes will vary from the pond intake to the sprinkler heads and will range from 50 mm to 150 mm. The irrigation system will water the primary playing areas of the golf course such as greens, tees, fairways and tee boxes.

The irrigation system will be established up-gradient of the former landfill to ensure that the water used is not affected by potential contaminants from the landfill.

#### **4.2.14. Water Supply**

Irrigation is proposed using two man-made irrigation ponds to be located near the driving range. Backup water supply will also be set up using Seal Pond, located just outside the property boundary, to the north. A pump house will be located on site to supply water.

To irrigate an 18-hole golf course, a typical demand for irrigation water would be approximately 300,000 US gallons per day. The two irrigation ponds to be located on site will be designed to adequately supply water for the irrigation system and will have a pressure capability of 500 – 1500 psi, depending on site conditions.

Seal Pond is planned as a back-up water supply source. Seal Pond has a surface area of approximately 14,250 m<sup>2</sup> (3.52 acres). Assuming a conservative 0.3 m depth over the entire water body, this equates to a volume of 4,275 m<sup>3</sup> (1,129,335 gallons). This water mass is estimated to be sufficient to provide back-up water supply to support the irrigation requirements for this 18 holes golf course. Should the project proceed, actual water measurements and requirements will be verified.



**4.2.15. Site Conditions for Irrigation Installation**

Based on the surficial and bedrock geology of the area, it is assumed that there will be rocky site conditions and that the irrigation system will have to be installed using heavy construction equipment.

**4.2.16. Irrigation Pump System**

The power source for the electric pump system will be a 3-phase electrical service.

In general terms, the irrigation pump system will be an electrically powered submersible or vertical turbine pump, supplying approximately 600 US gallons per minute (GPM) at an approximately pressure of 100 psi.

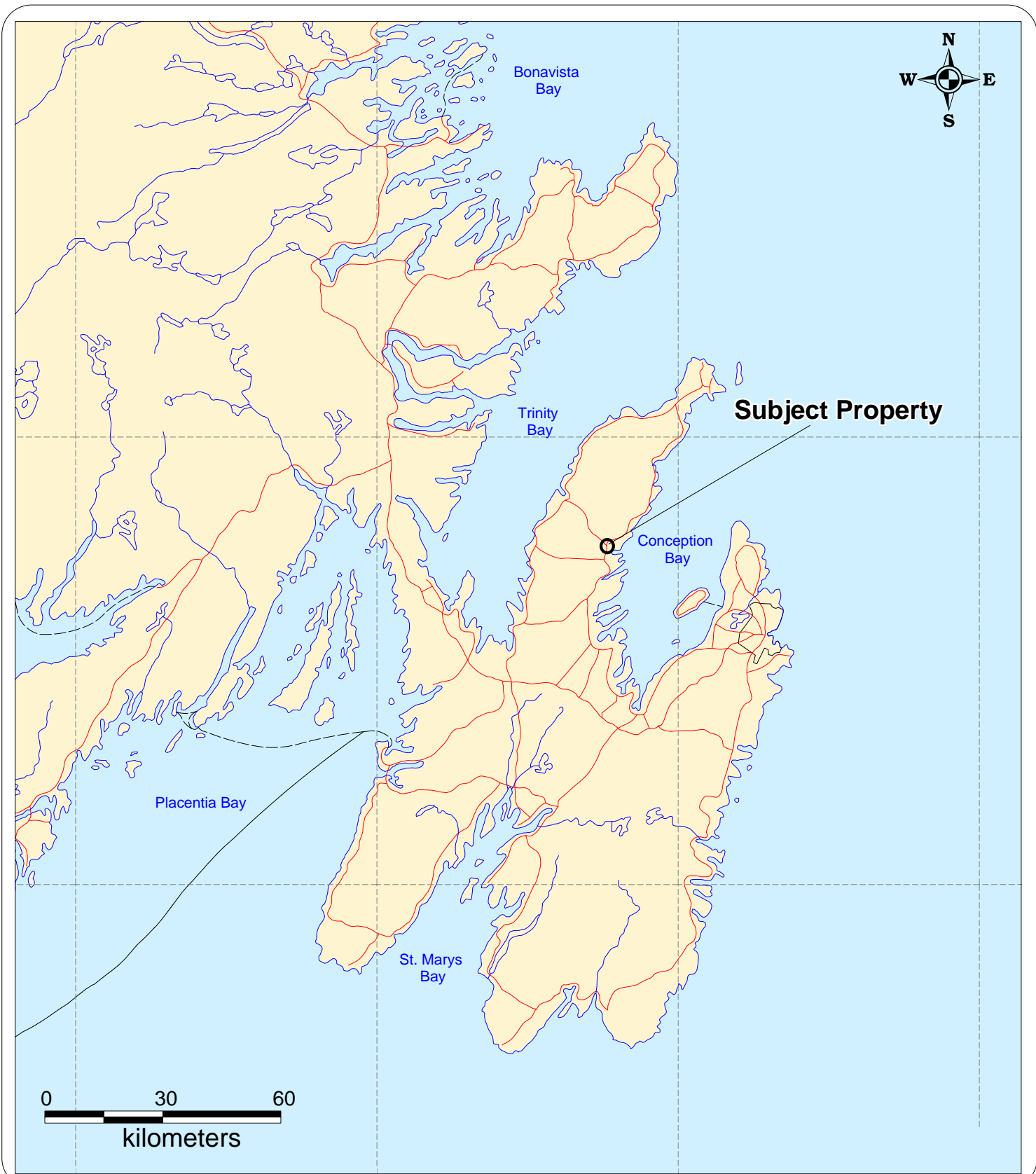
The pump will draw its water from a wet well enclosed within a pump house no less than 3 m<sup>2</sup> in size.

**4.2.17. Future Expansion - Plan One (Rental Units)**

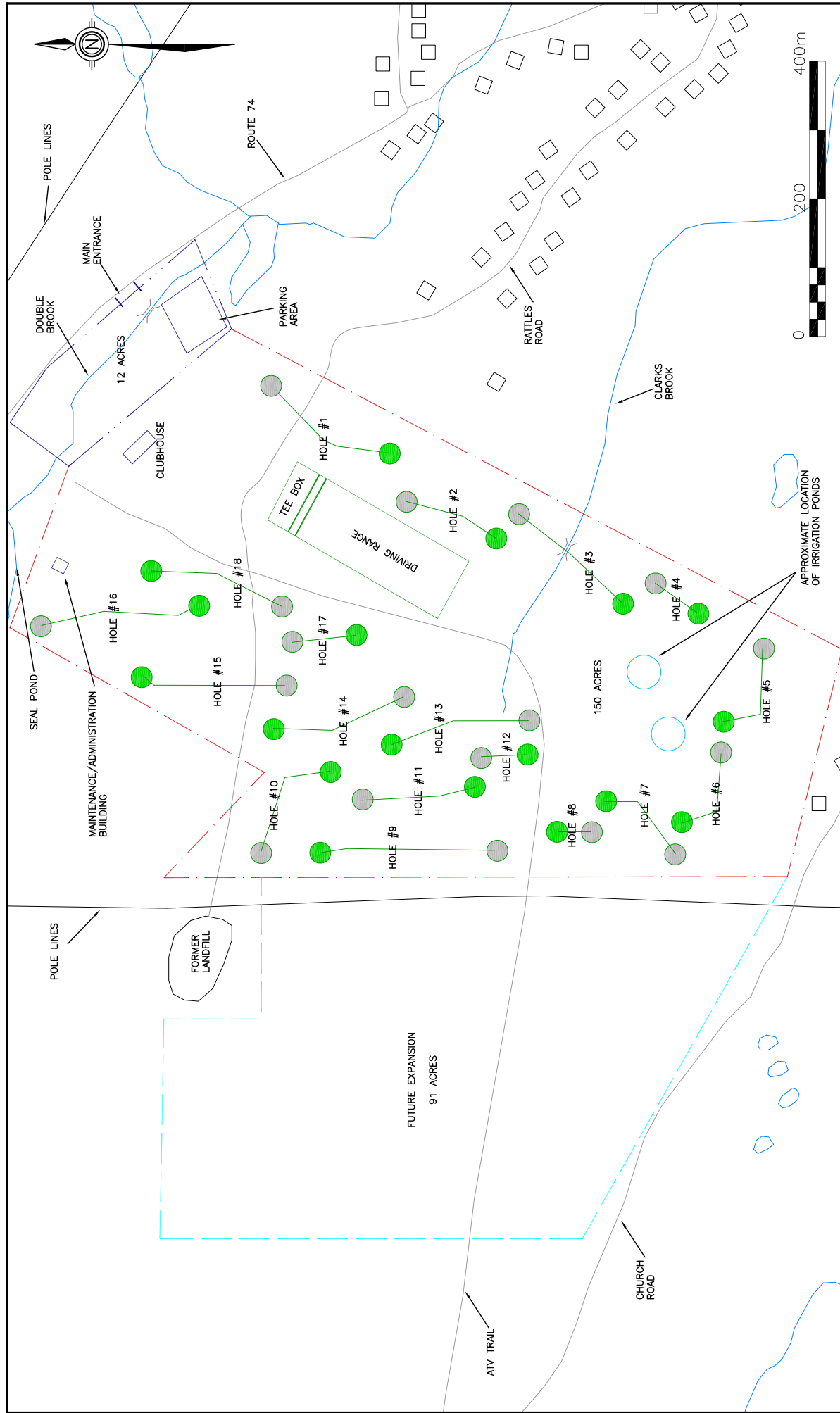
An approximate 100-acre area will be used for construction of rental units such as cabins. These rental units will accommodate golfers for a play and stay or vacationers who are only interested in accommodations (i.e. cabins, etc., See Figure 2).

**4.2.18. Future Expansion - Plan Two (Additional nine holes)**

An approximate 100-acre area is proposed for an additional nine holes. The course features will include green construction, tee construction and fairways for 9 holes, as well as hazards (i.e. traps and ponds) and paved cart paths. This section of the course will also include an in-ground automated irrigation system and drainage system (See Figure 2).



<b>CLIENT</b> The Rattles Golf and Country Club	 1133 Topsail Road Mount Pearl, NL A1N 5G2 Tel: (709) 368-0118 Fax: (709) 368-5410	<b>DESIGNED</b> AH	<b>DATE</b> 16/06/09	<b>CHECKED</b> LR	<b>DATE</b> 16/06/09
<b>PROJECT</b> Environmental Registration		<b>DRAWN</b> AH	<b>DATE</b> 16/06/09	<b>APPROVED</b> RH	<b>DATE</b> 16/06/09
<b>DRAWING TITLE</b> Figure 1. Victoria, Newfoundland		<b>SCALE</b> AS SHOWN	<b>PROJECT NO.</b> 723137		
		<b>FILENAME</b> 723137-Victoria NL-Fig-1.WOR			



REV.	REVISIONS	BY	APP.	DATE
DRAWN:	APPROVED:	RH		DATE: 16/06/09
AH		BNG PROJ. NO.		723137
CLIENT PROJ. NO.				DRAWING NO.
PR1-XX-EN-VG-001				REV.

CLIENT: THE RATTLES GOLF AND COUNTRY CLUB

PROJECT: ENVIRONMENTAL REGISTRATION DOCUMENT

DRAWING TITLE: FIGURE 2 - SITE PLAN

**SNC • LAVALIN**

**LEGEND**

- . - . - CROWN LAND PROPOSED FOR PHASE I AND II
- - - - - CROWN LAND TO BE USED FOR EXPANSION (ADDITIONAL 9 HOLES OR RENTAL UNITS)
- - - - - LAND OWNED BY PROPONENTS
- LOCATION OF GREEN
- LOCATION OF TEE

### **4.3. Construction**

#### **4.3.1. Construction Schedule**

The proposed development is to be carried out in three phases over an eight-year period. Start of construction is proposed for the fall of 2009, however, an exact date will be dependant on administration of paper work from different agencies involved (specifically issuance of an environmental approval and Crown title).

The phases of the construction are as follows:

##### Phase One (3 year period)

- Attaining 250 acres of crown land (as proposed in the application) and follow any procedures such as survey and registration;
- Installing 23 m of 1500 mm galvanized culvert to accommodate water flow from freeze and thaw as well as storm water and accommodate traffic entering the facility to comply with all municipal and highway regulations;
- Rough completion of front entrance to the course to pre-paving material;
- Construction of a practice range and a putting and chipping facility to open as soon as possible;
- Prepare site for pro shop and clubhouse. Prior to opening there will be a trailer used for this facility;
- Clearing of land for driving range and the first 9 holes;
- Obtain permits and install all drains required by engineered plans in compliance with all regulations;
- Shaping of the tee boxes, fairways and hazards (i.e., traps and ponds and cart paths, etc.);
- Fine grading of tees, fairways and green's to be seeded for turf. Materials include: roughs – creeping red fescue; tee's – bent grass; green's – LT1 bent grass; fairway's – bent grass; and
- Attaining municipal services: 100 m of water and sewer.

##### Phase Two (3 year period)

- Construction of a permanent clubhouse and pro shop;
- Clearing of second nine holes;
- Installation of any drains and irrigation system to accommodate these facilities;
- Shaping of tee boxes, fairways, roughs, hazards and cart paths; and
- Completion of maintenance/administration facility.

##### Phase Three (2 year period)

- Completion of all paving to complete project; and
- Land allotted for future development will be utilized for one of two plans:
  - a) Plan One – To construct rental units to be used to accommodate golfers for a play and stay or people on vacation who may have no interest in golf (i.e. cabins, etc.);

b) Plan Two – To construct a third nine holes to make a total of 27 holes to accommodate leagues, golf camps and alleviate high traffic golf weeks.

#### **4.3.2. Potential Sources of Pollutants**

The potential sources of pollutants are generally those normally associated with golf course construction. Adherence to permit conditions and application of sound construction practices will protect against the release of pollutants into the surrounding environment.

Strict monitoring and sound construction practices will control activities to minimize risks associated with:

- 1) Equipment fuels and lubricants
- 2) Siltation and sedimentation
- 3) Application of pesticides and fertilizers
- 4) Airborne emissions/noise pollution
- 5) General construction debris
- 6) Solid waste
- 7) Adjacent former landfill

#### **4.3.3. Mitigation Measures**

An environmental monitoring program will be put in place during the construction and operations stages to monitor all toxic substances and harmful impacts produced by the undertaking.

- 1) Equipment Fuels and Lubricants

To minimize the risk of fuel, lubricant or hydrocarbon release, construction equipment will not be permitted to be re-fueled within 30 m of any body of water. There is no planned fuel storage on the site during the construction period. A licensed outside contractor will fuel machines as needed. If it is necessary for fuel storage then it will be stored only in approved containers with all necessary permits in place.

Equipment likely used to construct the facility will include excavators, loaders, dump trucks, seeding trucks, etc. Equipment will be well maintained and monitored, and any issues that may cause hydraulic or fuel leaks will be avoided or mitigated with industry accepted practices.

- 2) Siltation and Sedimentation

Silt laden runoff from construction areas will not be permitted to discharge directly into any body of water or watercourse. Runoff will be diverted to settling basins to ensure silt is settled out prior to final release into the water. Silt fences constructed of filter fabric will be used where necessary to preclude release of construction water directly into any body of water.

### 3) Application of Pesticides/Fertilizers

Pesticides will only be applied when necessary in localized areas as a defense against weed, disease or insect infestations that threaten the area. Except for fungicides, which are generally applied to entire areas to be effective. An Integrated Pest Management program will be implemented with acceptable levels of pests being tolerated before spray programs are initiated.

Organic pesticides will be employed whenever possible and only pesticides approved by the Pesticide Control Section of the DOEC's Pollution Prevention Division will be used. Maintenance workers will be licensed with the Pesticide Section of DOEC. Pesticides will be stored in containers recommended by the manufacturer and in a storage facility approved by the Department. Pesticides will be used only where they are permitted to be used under applicable regulations.

The application of fertilizer will not be permitted within 30 m of any body of water. Samples of topsoil will be analyzed to determine application rates for fertilizer and limestone necessary for turf grass production. This will ensure that over fertilization does not occur and will minimize the nutrient loading of water bodies. Natural fertilization will be employed whenever possible such as topdressing and overseeding.

### 4) Airborne Emissions/Noise Pollution

Equipment exhaust systems will be maintained to provide emissions to the standard designed for by the equipment manufacturer.

The golf course is located close to residential areas on Church Road, Rattles Road and Route 74; however, noise generated from construction of a golf course is minimal and is not expected to be a concern.

### 5) Construction Debris

Construction debris will not be disposed of or buried on site. It will be contained on site in appropriate containers for disposal at municipal solid waste disposal facility.

### 6) Solid Waste

Addressed in the Section 4.4.3

### 7) Adjacent Former Landfill

The proposed footprint will be outside the limits of the former landfill. A minimum 30 m buffer zone will be maintained between the golf course boundary and the former landfill for all construction activities. No excavation or trenching will occur within the buffer zone or the limits of the former landfill.

Prior to the start of construction, the proponent will confirm with the province that soil and groundwater quality in the vicinity of the former landfill does not impact the future

golf course and its users. The proponent will obtain any existing information related to the former landfill. Should further assessment be required, the proponent will negotiate with the province regarding the completion of this work.

#### **4.3.4. Potential Resource Conflicts**

Construction procedures will be established and monitored to minimize the following potential resource conflicts:

- Fish and Fish Habitat

Construction activities at The Rattles will be conducted in such a manner to prevent the release of sediment or other deleterious materials into the streams on site. No construction will be undertaken within 15 m of a watercourse.

- Wildlife

Construction activities are not expected to cause any significant direct wildlife conflict.

- Forestry

Construction activities will be such as to minimize the clearing of the forested areas other than that required for construction purposes. All wood that has to be cut will be salvaged with larger logs utilized as saw logs and the remainder provided as firewood to the residents of Victoria.

The course layout is designed to take full advantage of existing open and previously cut out areas.

#### **4.4. Operation**

##### **4.4.1. Period of Operation**

The golf course will operate approximately between the end of May and the end of October each year. Weather permitting, the facility will open earlier than May and stay open later than October, however, this will be the typical operating schedule. During this period it will be open from daylight to dusk on a daily basis.

##### **4.4.2. Potential Sources of Pollutants**

The potential sources of pollutants during the operational phase of the project are:

- 1) Silt and sediment from gravel surfaces;
- 2) Equipment fuels and lubricants;
- 3) Application of pesticides and fertilizers;
- 4) Airborne emissions/noise pollution;

- 5) Solid waste/sewage;
- 6) Dust generation from gravel surfaces; and
- 7) Adjacent Former Landfill.

#### **4.4.3. Mitigation Measures**

- 1) Silt and sediment from gravel surfaces

Silt and sediment may affect water bodies through the runoff of storm water. Vegetated buffer zones will be maintained to keep the impact to a minimum. Settling ponds or basins will be used in areas where silt or sediment runoff could be a concern. The water resource division of the DOEC will be consulted on the design of all settling ponds or basins to ensure all applicable design standards are met.

- 2) Equipment Fuels and Lubricants

There is no planned fuel storage on the site during operation. A location will be identified for fueling machines, if necessary, and fuel will be brought on site on an as-needed basis.

- 3) Application of Pesticides/Fertilizers

Addressed in Section 4.3.3.

- 4) Airborne emissions/noise pollution

Addressed in Section 4.3.3.

- 5) Sewage/Solid Waste

Sewage will be generated at the pro shop and clubhouse facility, the maintenance/administration building and at the washroom facility between the first 9 holes and last 9 holes. Septic sewer systems will be constructed at each of the sites following approved methods for construction and maintenance of the DOEC.

Solid waste will be collected on a regular basis by the Municipality of Victoria.

- 6) Dust Generation from Gravel Surfaces

The access road and parking lot will be paved, however, after the first phase it will be gravel surface. Dust created from this gravel surface and other gravel surfaces during the first phase will be minimal. If dust generation becomes an issue, water trucks will be used to mitigate the effects.



#### 7) Adjacent Former Landfill

A minimum 30 m buffer zone will be maintained between the golf course boundary and the former landfill. Water for the irrigation system will be obtained up gradient of the former landfill to ensure no distribution of potential contaminants.

#### 4.4.4. Potential Resource Conflicts

Procedures will be established and monitored to minimize the following potential resource conflicts:

- Fish and Fish Habitat

Application of pesticides, herbicides, and fertilizers will be conducted in such a manner to limit amounts entering surrounding surface water bodies. Buffer zones will be maintained between fairways and water bodies.

- Wildlife

Operations of the golf course are not expected to cause any direct wildlife conflict.

- Forestry

Operation of the golf course is not expected to cause resource conflicts with forest resources.

#### 4.5. Occupations

The labour requirements for construction are estimated to be approximately 20 people intermittingly over an 8-year period. The occupations involved will include:

- Engineers
- Draftspersons
- Surveyors
- Labourers
- Carpenters
- Forepersons
- Office Staff
- Heavy Equipment Operators

The labour requirements for operation of the golf course are expected to be approximately 15. The occupations involved include:

- Receptionist
- Clubhouse Staff
- Superintendent
- Irrigation Technician

- Mechanic
- Maintenance People
- Golf Marshalls/ Rovers
- Labourers

#### 4.6. Project Related Documents

The Rattles Golf and Country Club Preliminary Development Plan, October 16, 2008. Copies of this report are available at the office of BAE-Newplan Group for review.

### 5. APPROVAL OF UNDERTAKING

The permits, licenses, approvals and other authorizations which may be required for the proposed undertaking include, but may not be limited to those shown in the following table. It is noted that some of these permits/approvals have already been granted to the proponents.

PERMIT, APPROVAL OR AUTHORIZATION	ISSUING AGENCY
Approval for the Undertaking	Department of Environment and Conservation
Certificate of approval for sewage treatment system	Department of Environment and Conservation
Certificate of Approval for Construction (Site Drainage)	Department of Environment and Conservation
License for Pesticide Application	Department of Environment and Conservation
Certificate of Approval for any Water Withdrawal System (Seal Pond)	Department of Environment and Conservation
Permit to alter water body (culvert, small bridges)	Department of Environment and Conservation
Certificate of Approval for the Storage and Handling of Gasoline and Associated Products	Department of Government Services
Permit to Occupy Crown Land	Department of Environment and Conservation, Lands Manager
Municipal Operating Permit	Department of Municipal Affairs
Permit for site access	Department of Works Services and Transportation
Permit to Cut and Burn	Department of Natural Resources
Historic Resource Impact Assessment	Dept. of Tourism, Culture & Recreation

**6. SCHEDULE**

Construction of this project is scheduled to begin in the fall of 2009, however, a firm date cannot be provided based on varied timelines of administrative paperwork required. The requirements of the Environmental Assessment Act should be completed by as soon as possible.

**7. FUNDING**

Financing of this project will be from the development company (owned by Brad and James Baker). The full-assessed value for development is \$157,000.000 plus HST. The Rattles Golf and Country Club is requesting to carry the payments over the eight-year term paying \$22,392.50 per year to stay on budget.



**SNC • LAVALIN**

[www.snclavalin.com](http://www.snclavalin.com)

**SNC-LAVALIN Inc.**  
1133 Topsail Road  
Mount Pearl, NL A1N 5G2  
Tel.: (709) 368-0118  
Fax: (709) 368-3541