

Chris Squires Enterprises Inc.

522B Old Broad Cove Road
Portugal Cove/St. Philips
A1M 1Z2
(709) 687-7535

Bauline Line Extension Quarry Expansion

ENVIRONMENTAL ASSESSMENT REGISTRATION DOCUMENT

Contents

1. Name of the Undertaking.....	1
2. Proponent	1
3. The Undertaking:.....	1
3.1 Nature of the Undertaking:.....	1
3.2 Purpose/Rationale/Need for the Undertaking:	1
4. DESCRIPTION OF THE UNDERTAKING:.....	2
4.1 Geographic Location and Access	2
4.2 Physical Features	2
4.3 Construction.....	3
4.4 Development.....	3
4.5 Operation	4
4..6 Project Related Documents.....	5
5. APPROVAL OF THE UNDERTAKING:.....	5
6. SCHEDULE:	5
7. FUNDING:.....	6
8. SUBMISSION:	6

1. Name of the Undertaking

Bauline Line Extension Quarry Expansion

2. Proponent

Name of Corporate Body:

Chris Squires Enterprises Inc.

Address:

Chris Squires Enterprises Inc.

522B Old Broad Cove Road

Portugal Cove – St. Philips

A1M 1Z2

(709) 687-7535

Principle Contact: Mr. Chris Squires

Principle Contact Person for the purposes of the Environmental Assessment:

Chris Squires

Owner/Operator of Chris Squires Enterprises Inc.

522B Old Broad Cove Road

Portugal Cove – St. Philips

A1M 1Z2

(709) 687-7535

3. The Undertaking:

3.1 Nature of the Undertaking:

The project is a proposed extension to the existing Chris Squires Enterprises Inc. ("CSE") gravel and rock quarry located on Bauline Line Extension, Portugal Cove - St. Philips. The purpose of the extension is to secure a long term source of aggregate for the company to ensure it can support developments in the Portugal Cove – St. Phillips and surrounding areas now and in the future.

3.2 Purpose/Rationale/Need for the Undertaking:

Aggregate resources (e.g., rock, sand and gravel) are a major requirement in most construction projects for uses such as fill, asphalt and concrete. There are currently a limited number of quarries located in Portugal Cove – St. Philips and the surrounding areas with limited

possibilities to develop quarries due to various land use conflicts (e.g., residential developments, municipal zoning regulations, private land, etc.). An extension to the existing quarry permit will secure a supply of aggregate for CSE for the foreseeable future.

4. DESCRIPTION OF THE UNDERTAKING:

4.1 Geographic Location and Access

CSE is based out of the town of Portugal Cove – St. Philips on the northeast Avalon Peninsula (Figures 1, 2 and 3). We are currently operating an 8.1 hectare quarry located approximately 0.35 km southwest of Picco's Pond off Bauline Line Extension (Figure 4). To date, CSE has developed approximately 2 hectares of their existing 8.1 hectare quarry permit. The proposed expansion (i.e., this project) is located immediately south of this existing site (Figure 5). This project is proposing to extend the boundary of the quarry area an additional 300 meters to the southwest to encompass an additional 9.1 hectares bringing the total site area to 17.1 hectares.

Access to the existing site is via an approximately 500 meter long gravel access road that extends west from Bauline Line Extension (Figure 6). The expansion will be accessed through the existing quarry site, thus no new access roads will be required.

Land use in the general area is typically agricultural (e.g., fields, sod farms and topsoil making facilities). There are no residences located within 300 meters of the quarry boundary. The area is situated between 600 meters to over 1 kilometer west of Bauline Line Extension, and is therefore out of direct view of the public travelling along that route. A tree screen along the Bauline Line Extension also helps shield this site from view. The NAD 83, UTM zone 22 coordinates of the boundaries of the project area are shown on Figure 6.

4.2 Physical Features

In terms of ecology, the area is located within the Northeastern Barrens Sub-region of the Maritime Barrens Ecoregion which is characterized by frequent fog and strong southerly winds. Given its northerly location within the ecoregion, the Northeastern Barrens sub-region experiences less fog and wind and warmer summer temperatures than its southern counterparts.

The difference in climate has led to more extensive forest cover than the other three sub-regions. However barrens are the most common landscape feature and slope bogs, basin bogs and fens occur regularly, reflecting the poor drainage and wet climate in the ecoregion.

The access road skirts the northeast boundary of a small bog before increasing approximately 40 to 50 meters in elevation to the quarry site. The Company applied for and acquired this quarry permit in 2015 and has been operating the site since then. Both the existing site and the proposed extension sit on the southeast side of a ridge which is heavily wooded with a combination of spruce and fir, as well as small amounts of birch, alder and larch all covering a layer of organic material and glacial till. Such features are typical of the Northeastern Avalon

Peninsula.

The area is home to moose, mink, snowshoe hare, red fox, beavers, muskrats, ducks and a variety of other bird species and small animals (e.g., red squirrel, brown bat, meadow vole, masked shrew, eastern chipmunk and the short-tailed weasel). The small ponds in the area contain several species of fish.

4.3 Construction

No buildings or structures will be constructed on the site. Any structures necessary to support the quarry operations will be temporary in nature (e.g., weigh scales, scale house, etc.).

4.4 Development

The development of the proposed quarry area will occur in a number of phases:

1. Stripping of vegetation and organic material
 - a. Timber clearing will be conducted as per the Department of Fisheries and Land Resources ("Forestry"). The operator will obtain a commercial cutting permit and an operating permit prior to clearing the sites.
 - b. A minimum 50 meter naturally vegetated buffer will be maintained where possible along all waterbodies and wetlands to protect sensitive riparian and aquatic species, and their habitat.
 - c. Where possible, vegetation clearing or excessive noise will be conducted outside the nesting, breeding and brood rearing season from May to mid-July.
 - d. Topsoil cleared prior to or throughout the course of the quarry operation will be stockpiled along the perimeter of the quarry permit and will be retained for rehabilitation purposes
 - e. In an effort to prevent runoff into nearby water bodies, stripping of vegetation will be limited to that required for the current construction season.
2. Phased development of quarry operations
 - a. Excavation, drilling, blasting, crushing/screening, stockpiling and loading of quarry materials (rock, sand and gravel)
 - b. Transportation of product to market

The goal is to develop the site in the most logical and efficient way possible. Although the current site is expected to sustain the needs of the company for the next number of years, the addition of this parcel of land may change the way in which the site as a whole is developed – thus a portion of the extension may be developed prior to the exhaustion of the existing quarry permit area.

As development progresses, the site – except for the access road and those areas necessary for laydown areas - will be progressively rehabilitated. Rehabilitation will include the contouring, sloping and spreading of organic material to encourage natural revegetation.

4.5 Operation

Regular operations will take place as weather permits, although typically operations occur between May and November annually. The site will operate and be maintained, and all operations conducted, according to all applicable Environmental, Municipal, and Occupation Health and Safety regulations. The project will be regulated under the Quarry Materials Act and Regulations and, as such, will be regularly inspected by Department of Natural Resources Quarry Inspectors.

Quarry operations will include the removal of overburden material to expose gravel deposits and/or bedrock. Gravel will be excavated directly and processed; bedrock will first be drilled and then blasted prior to excavation and processing. Processing may include crushing, screening, washing and stockpiling quarry materials using various types of equipment such as excavators, front-end loaders and crushers. Dump trucks will be used for transportation to market.

Potential Sources of Pollutants:

Potential sources of pollutants include release of petroleum products from equipment, noise, site drainage, and air emissions (either dust or fly rock), and refuse from illegal dumping activities. All best practices will be followed in order to minimize potential for any of these items. Such measures include but are not limited to:

- a) No petroleum products will be stored on the site,
- b) Petroleum products will be handled as per Storage and Handling of Gasoline and Associated Products Regulations, 2003 and associated products regulations, under the Environmental Protection Act SNL 2002.
- c) Spill kits will be stored on site in case of incidental spills from equipment,
- d) All equipment on the site will be maintained in good working condition.
- e) Domestic waste generated will be collected and disposed of as per the Waste Management Regulations, 2003.
- f) Refuse produced on the site will be stored in bins and disposed of at an approved waste disposal facility
- g) No burning of refuse will be occur at the site
- h) The entrance to the quarry will be gated in order to discourage illegal dumping activities
- i) Washing activities will not be conducted on the site,
- j) Vehicles entering and leaving the site will follow a designated route and maintain low speeds,
- k) Vegetation will remain on undeveloped areas of the site until such a time as operations require its removal to limit runoff and the risk of sedimentation of nearby waterbodies and wetlands.
- l) Sedimentation control structures (e.g., silt fences, ditches, rock check dams, etc.) will be installed where necessary.

Occupations:

Occupations at the site will include the following:

- 1 Site Supervisor (7205)
- 2 - Heavy Equipment Operators (e.g., excavator, loader and crusher operator) (7421)
- 1 - Dump truck drivers (7411)
- 1 - Quarry foreman/supervisor (8221)
- 1 - Laborer (7611)
- 1 - Heavy Equipment Mechanic (7311)

It is not anticipated that any new staff will be hired for this expansion. Instead, this expansion will help secure existing positions for the long term.

4.6 Project Related Documents

Quarry Permit Application submitted to the Department of Natural Resources (File No. 711:11145

5. APPROVAL OF THE UNDERTAKING:

<u>Permits/Approvals</u>	<u>Issuing Department/Agency</u>
Quarry Permit	Mineral Lands Division , Department of Natural Resources
Commercial Cutting Permit	Forestry Services Branch, Department of Fisheries and Land Resources
Operating Permit	Forestry Services Branch, Department of Fisheries and Land Resources
Development Permit (Town of Portugal Cove – St. Phillips)	Town of Portugal Cove – St. Phillips

6. SCHEDULE:

Development in the project area is not expected to begin within the next 5 years. It is expected that a portion of the project area will be developed within the next 2 years. A review of the entire land package will be conducted to determine the most logical and efficient process to develop the site.

7. FUNDING:

All funding for the project will be provided by CSE.

8. SUBMISSION:

Thank you for your consideration in this matter. The above information has been provided to the best of our knowledge, and we hope that all necessary information has been provided within the body of this document. However, should any further information or further clarification be required, please contact the undersigned.

Chris Squires

Date: March 12, 2018

Chris Squires

Chris Squires Enterprises Incorporated
522B Old Broad Cove Road
Portugal Cove – St. Philips
A1M 1Z2



Figure 1. The project is located in eastern Newfoundland, on the Avalon Peninsula.

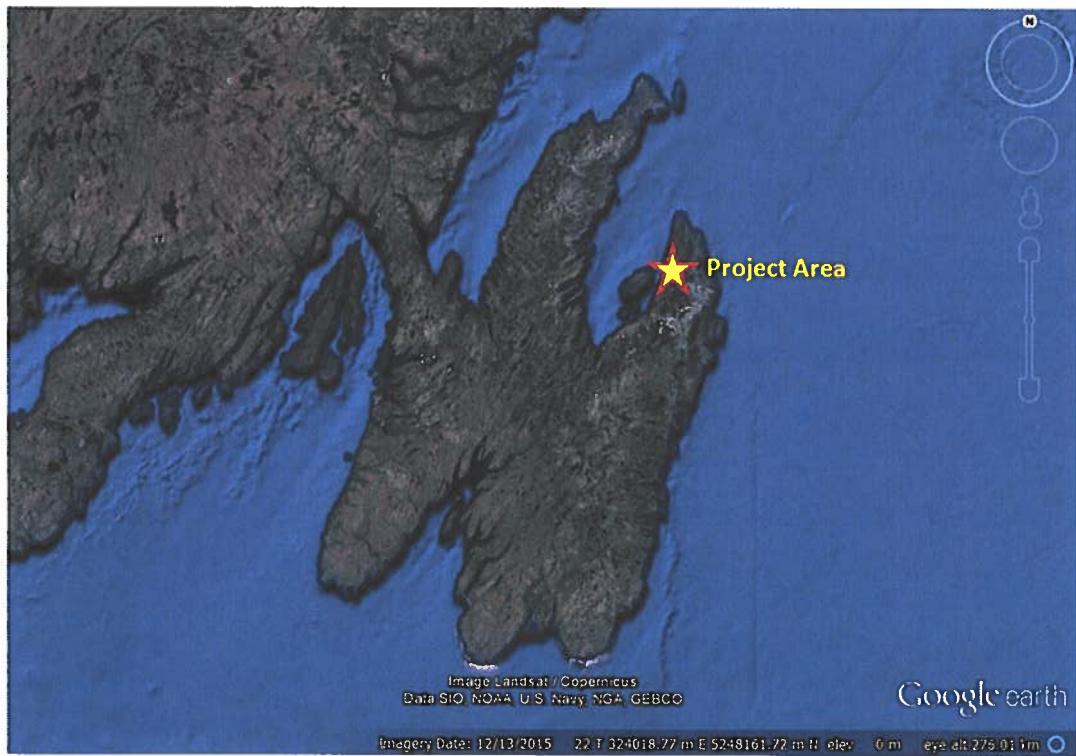


Figure 2. The project is located on the northeast Avalon Peninsula.

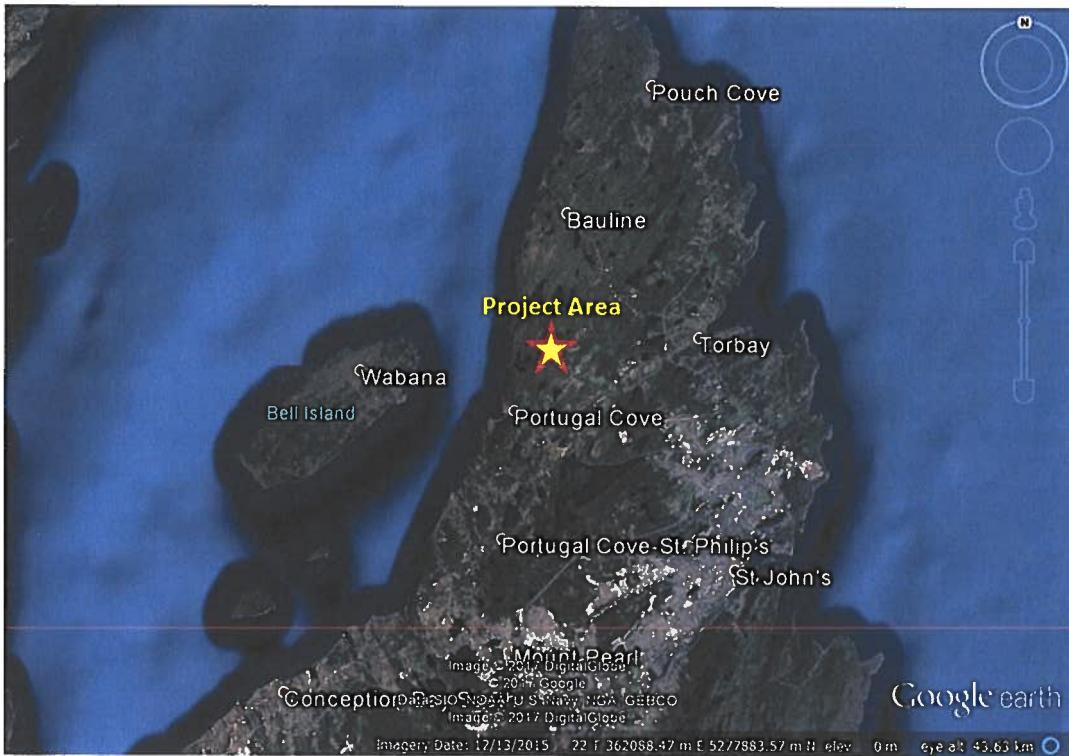


Figure 3. The project is located on the northeast Avalon Peninsula, within the town of Portugal Cove-St. Philip's.

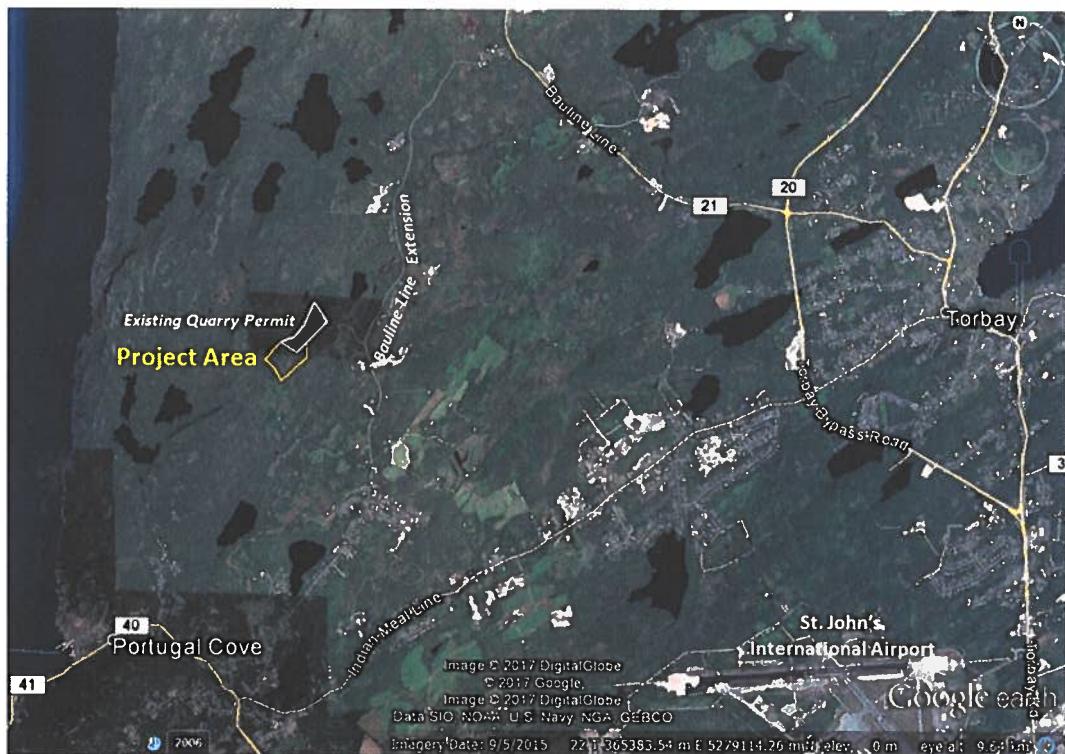


Figure 4. The project is located off Bauline Line Extension, Portugal Cove – St. Philip's.



Figure 5. The project is located approximately 0.35 kilometers southwest of Picco's Pond. The existing quarry permit held by CSE is outlined in white; the proposed expansion is outlined in yellow.

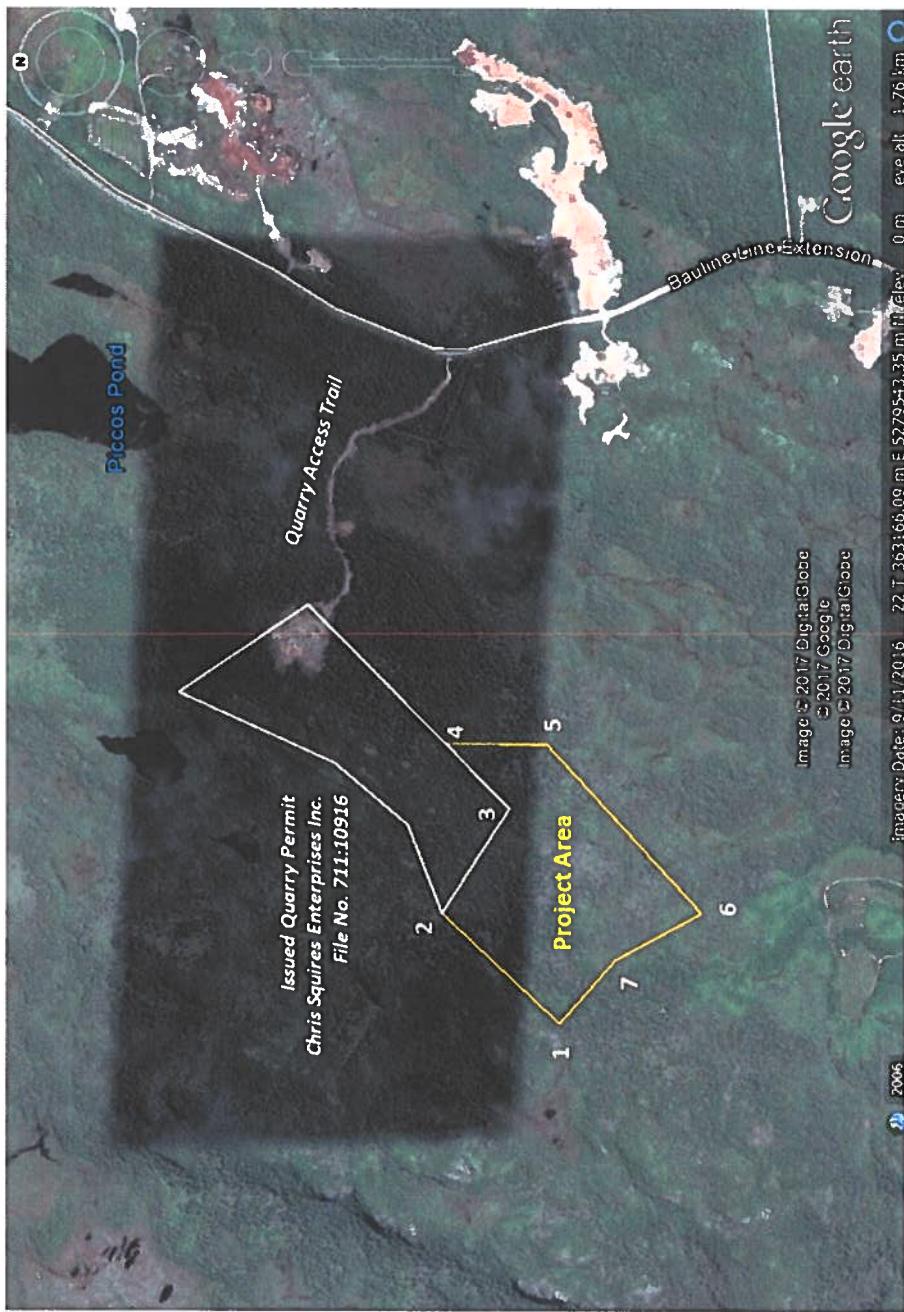


Figure 6. The existing quarry site is accessed via an approximately 500 meter long gravel access road that extends west from Bauline Line Extension. Access to the proposed expansion will be through the existing quarry permit. UTM Coordinates of the boundaries of the site are (NAD 83, UTM Zone 22):

The NAD 83, UTM Zone 22 coordinates of the boundaries of the project area are:

1. 362,592 m E 5,279,396 m N
2. 362,767 m E 5,279,575 m N
3. 362,929 m E 5,279,466 m N
4. 363,042 m E 5,279,574 m N
5. 363,032 m E 5,279,405 m N
6. 362,762 m E 5,279,170 m N
7. 362,689 m E 5,279,307 m N