Name of Corporate Body:	Thistle Investments P. O .Box 4045 Mount Pearl, NL A1N OA1
Chief Executive Officer	Brendan Brenton P O Box 4045 Mount Pearl, NL A1N OA1 (709) 690 5724
Contact Person	Bren Brenton (same as above)

## THE UNDERTAKING: Thistle Investments Shale Rock Quarry

The purpose of this quarry is to supply shale rock for the construction of roads and to provide backfill for the installation of water and sewer at Thistle Investments 81 lot Subdivision located on Winterland Road in the Town of Burin.

To establish a 5 hectare shale quarry approximately 4 kilometers west of Mortier. The quarry is in an area known as The Green Hill and lies within the boundaries of the town of Burin.

Figure 1 shows where the quarry will be located. It will be 4 kilometers from the town of Mortier on the island portion of the province of NL



Figure 1: Island of Newfoundland

There are several quarries in the immediate area of the Thistle Investments quarry and it borders the western boundary of the quarry owned by the Town of Burin. The GPS plot points for the quarry are listed under Figure 3.

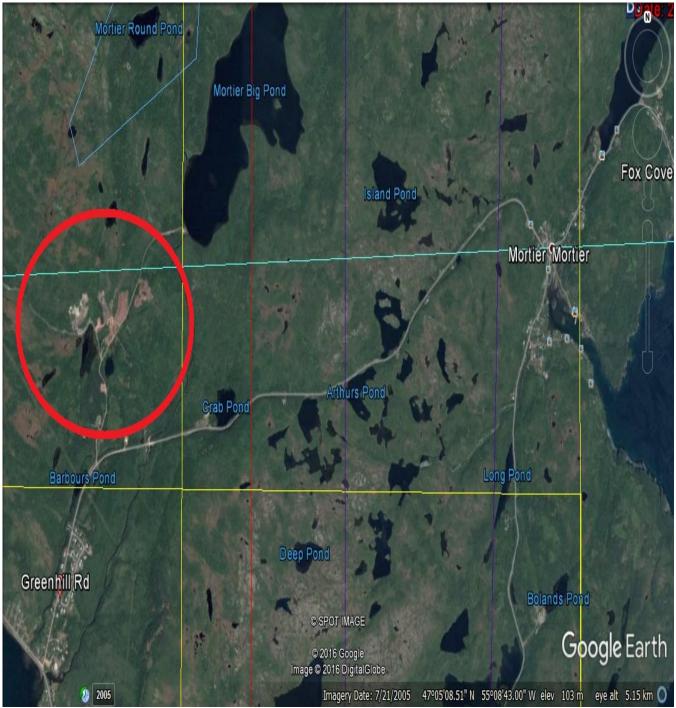


Figure 2: Red Circle indicates proximity of existing quarries in the Green Hill area to the Town of Mortier.

Thistle Investments Quarry starts at the western boundary of the quarry owned by the town of Burin. Greenhill Access Road owned by the Town of Burin junctions off the paved access road to Mortier, which is owned by the Department of Highways and it travels approximately 2 kilometers up Greenhill Road. The road forks off to the right to Mortier Big Pond. To the left the road continues to the quarry area, which is owned and has been previously approved by the town of Burin to access the quarries. The Thistle Investments quarry will border on the western boundary of the town of Burin Quarry as shown in Figure 3.



Figure 3: Boundaries of Thistle Investment Quarry outlined in yellow and red starting at the western boundaries of the town of Burin quarry.

The GPS points for the Thistle Investments Quarry:

NTS MAP SHEET	(e.g. 01N/10):	<u>0</u>	1M/03	UTM ZC	ONE _	19 _20	x21 _22
1. 638016 mE 2. 638090 mE 3. 638399 mE 4. 638380 mE	5216717 mN 5216560 mN		638197 638144			10 mN 19 mN	

**Physical Features:** There are no buildings within 2 kilometers of the site. There is a small access road passing by the proposed site and this road was built approximately 20 years ago when the town put a second water line though the area to service Salt Pond- Winterland Road area of Burin. There is a NL Power transmission line passing approximately 800 meters to the nearest point to the site.

The physical size of the undertaking is 5 hectors measuring 350 meters x 140 meters.

The quarry site is covered with shrubs and low lying trees. The Department of Natural Resources were contacted and they advised us that the quarry, as mapped out with the above coordinates, will not encroach on any bodies of water or streams. The effect on wild life should be at a minimum with the area not having the proper cover for larger animals such as moose or coyotes and there are no fish habitats in the area to be affected.

**Construction:** It will take about 6 to 8 weeks to prepare the quarry for operation and the proposed starting date would be mid May 2017. To create the quarry all shrub, topsoil and overburden will have to be removed and stored until quarry is exhausted and then refurbished according to the standards laid down by the Department of Natural Resources. There will not be any physical structures on site of any kind.

There will be minimal amounts of dust coming from the site during the removal of the overburden while preparing the site to produce shale rock. There are no known potential causes for resource conflicts.

**Operation:** There will be no screening, crushing, or washing, etc. on site. However there will be minimal amounts of rock dust coming from the excavated areas of the quarry. There will be no permanent fuel storage on site, and the equipment will be fuelled by a certified portal fuel tank. Any equipment working on site such as dump trucks, excavators, etc. will have spill kits stored on each individual piece of equipment.

**Occupations:** Three to five employees. Staff will include 1 or 2 excavator operators NOC #7521(Operating Engineers) when required and 2 or more truck drivers NOC 7305.

**Project Related Documents:** The Burin Town Council has approved the permit to operate a quarry within the town boundaries.

The documents to rezone the area from rural to mineral works has been posted in the Southern Gazette and will be posted in the Newfoundland and Labrador Gazette on Friday Feb. 17<sup>th</sup> 2017 Volume 92 #7

**APPROVAL OF THE UNDERTAKING:** The town of Burin has re-zoned the area from Rural to Mineral works to allow the quarry to go forward. The required documents have been sent to the Minister of Municipal Affairs for approval. The Quarry Permit Application located in Burin has been filed and approved pending the Environmental Assessment with The Department of Natural Resources, Mineral Lands Division. The Department of Natural Resources permit (Forest Fire Season) will be obtained from The Department of Fisheries, Forestry and Agrifoods, Forestry Services Branch.

**Schedule:** The latest date would be mid-April 2017 assuming all approvals are in place. This will allow time for clearing overburden from quarry before construction season starts which is usually in May.

Funding: N/A

March 8th, 2017 Date:

1/2 as

Signature of Chief Executive Officer