

# CLARKE'S TRUCKING AND EXCAVATING LIMITED

SPECIALIZING IN ALL TYPES OF GRANULAR PRODUCTS  
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ENVIRONMENTAL ASSESSMENT REGISTRATION

PROPOSED QUARRY APPLICATION - FOXTRAP, CBS (1KM WEST OF GULL POND)

March 20, 2018

Minister of Environment and Climate Change  
PO Box 8700  
St. John's, NL A1B 4J6

Attn: Director of Environmental Assessment

Clarke's Trucking and Excavating Limited is in the process of applying for a quarry permit in Foxtrap, Conception Bay South. The quarry is in the area of the Foxtrap Access Road and requires an environmental assessment registration.

Our environmental assessment can be viewed for your recommendation, following this letter.

Regards,

A handwritten signature in black ink, appearing to read 'Kyle Clarke', written over a solid horizontal line.

**Kyle Clarke**

**Clarke's Trucking and Excavating Limited**

**163 Paradise Road, Paradise, NL A1L 2Y1**

**Office: 1 (709) 782-0096**

**Fax: 1 (709) 782-4905**

Encl. Environmental Assessment Registration

**Environmental Assessment Registration  
Clarke's Trucking and Excavating Limited**

Proposed Quarry Application - Foxtrap, CBS (1km West of Gull Pond)  
Quarry Application #71112290  
File Ref. No. 200.20.2678

**NAME OF UNDERTAKING:**

**PROPONENT:**

Clarke's Trucking and Excavating Limited  
163 Paradise Road, Paradise, NL A1L 2Y1

Chief Executive Officer:

Keith Clarke

Director

163 Paradise Road, Paradise, NL A1L 2Y1  
(709) 782-0096

Principal Contact Person for purposes of environmental assessment:

Kyle Clarke

Superintendent

163 Paradise Road, Paradise, NL A1L 2Y1  
(709) 782-0096

**THE UNDERTAKING:**

(i) Name of the Undertaking:

Application for Quarry Permit - Foxtrap, CBS (1km West of Gull Pond)

(ii) Purpose/Rationale/Need for the Undertaking:

Clarke's Trucking and Excavating Limited is in the process of applying for a quarry permit 1km west of Gull Pond on the Foxtrap Access Road, Foxtrap, CBS. The purpose

for this quarry application is to remove sand, gravel, rock and borrow material in order to produce sand and stone. We produce top quality sand and stone products to supply not only the Avalon Peninsula, but the entire island. Please refer to the following figure (figure 1) for a general location of the proposed quarry. Our final products will be hauled by semi-dumps to any destination over the entire island. We have had many requests over the last few years to have our materials brought to sites on the west coast and northern peninsula.

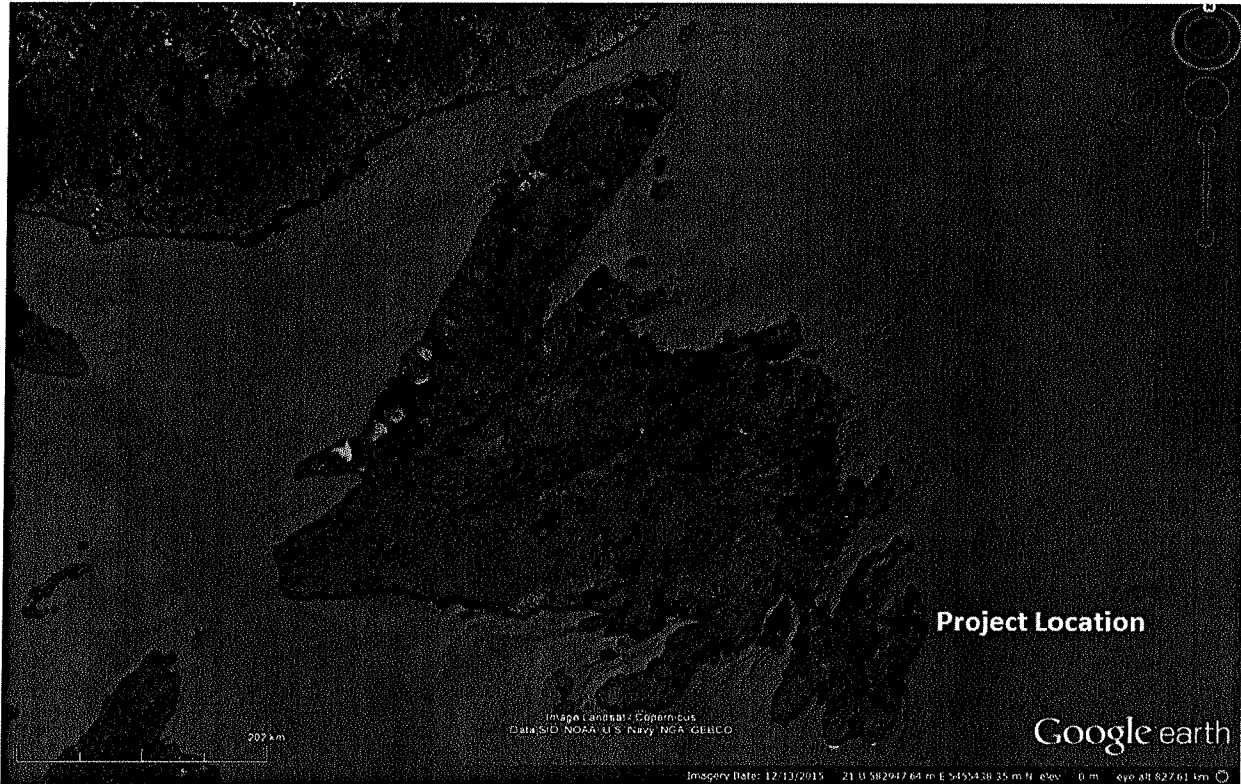


Figure 1 - Provincial Map with Quarry Location

The next image (figure 2) represents the proposed quarry in relation to the Avalon Peninsula, mainly St. John's and vicinity. You will see that the quarry is located on the Foxtrap Access Road. This is also an advantageous area because it intersects directly with the Trans Canada Highway (Route 1), giving us quick access to haul materials to various municipalities which we supply with sand and stone.

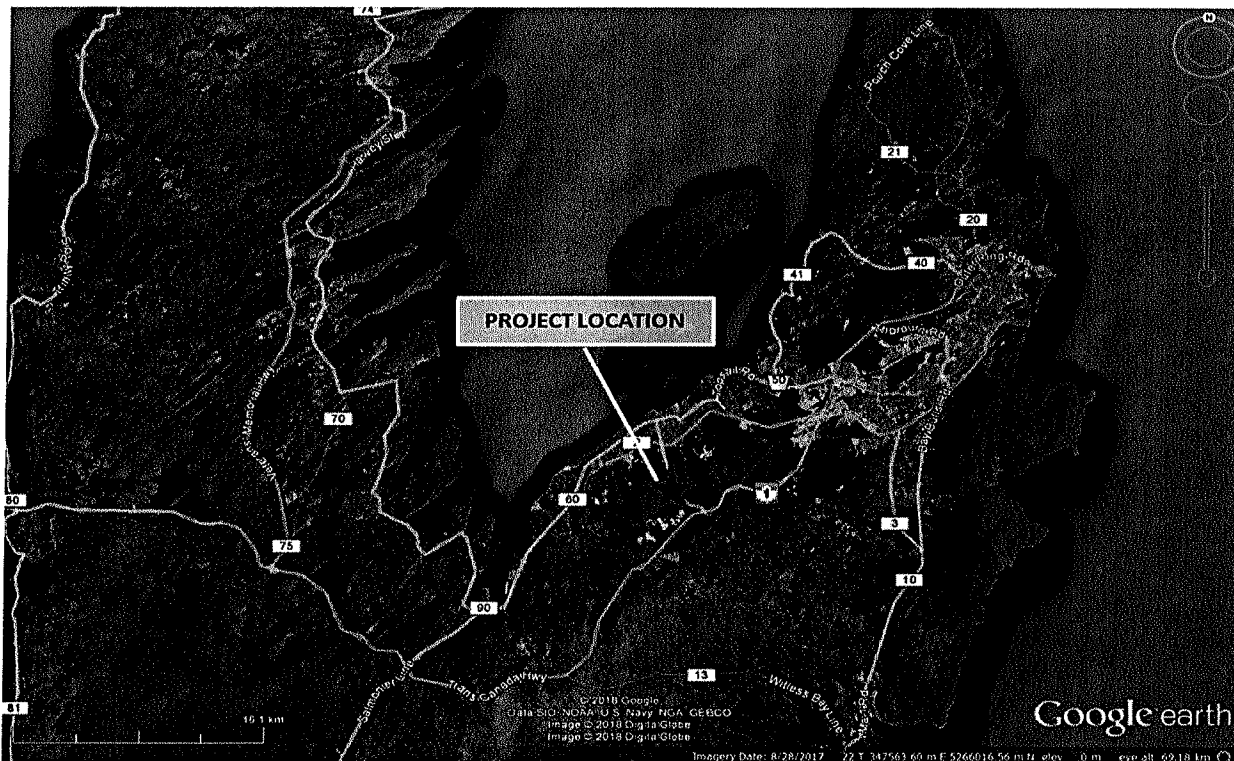


Figure 2 - Quarry location in relation to Avalon Peninsula.

## DESCRIPTION OF THE UNDERTAKING:

### (i) Geographical Location:

The proposed quarry site is located 1km West of Gull Pond on the Foxtrap Access Road, Foxtrap, CBS. The quarry is located on an existing gravel access road which intersects with the Foxtrap Access Road. The gravel access road is 3.3km driving distance from the Trans Canada Highway - Foxtrap Access Road interchange. Please refer to figure 3 on the next page for an understanding of the road network in the area.

Figure 4 will also relate the quarry to various local roads in Conception Bay South. You will also notice the existing quarry located across the gravel access road from our proposed quarry.



Figure 3 - Proposed Quarry in relation to the Foxtrap Access Road and TCH (route 1).

The corner points are labelled by number in the top left corner of the image. The coordinates for each point are as follows:

- 1.) 349845.00 mE , 5258664.00 mN
- 2.) 350060.00 mE , 5258659.00 mN
- 3.) 350073.00 mE , 5258426.00 mN
- 4.) 349860.00 mE , 5258430.00 mN

Note: Coordinates are taken from google earth (WGS84 coordinate system).

This location is attractive for sand and stone removal because there is an old/existing quarry located on the other side of the access road which was used for sand and stone production. More importantly, the mineral deposit between the Foxtrap Access Road and the Holyrood Access Road is where this type of sand material is located. Plus, Newcrete Investments has 99% of the area where this is located tied up in exploration permits and quarry permits.



Figure 4 - Proposed Quarry in relation to local roads in Conception Bay South.

(ii) Physical Features:

The proposed quarry site covers an area of 4.98 Hectares. But there will not be any structures, roads, pipelines, etc., constructed on the site.

There aren't any water bodies located inside or around the boundary of the proposed quarry, therefore we do not believe that any marine wildlife (fish) will be affected by any quarry operations.

In order to proceed with quarry operations in the proposed area, the vegetation over the land will be affected. The land will need to be cleared and grubbed to allow for sand and stone removal. Once the land is grubbed and ready for sand removal, the excavation will start. Depending on the depth of sand that will be removed, the topography of the existing land may change. The depth of the sand excavation in this area will be determined by the depth of the underlying bedrock and/or the depth of the groundwater table. In this quarry we are only interested in sand and stone, therefore if we hit bedrock we will cease excavation activity immediately.

In the case of encountering a high groundwater table while excavating, we will also cease excavation activity. According to the permit rules and regulations set forward by the Department of Natural Resources, excavation will not proceed below the groundwater table.

Refer to Figure 5 on the next page for an aerial view of the vegetation in the limits of the proposed quarry. The gravel road, which we will be using as access to the quarry is also shown in closer proximity.



Figure 5 - Vegetation cover over proposed quarry. Note existing gravel access road as well.

### (iii) Construction:

The construction period of a quarry may last years, depending on how much material you are able to remove. But the development time of that quarry may only take a fraction of that time. Please see our preliminary schedule for the construction of the proposed quarry once permits are in place:

- 1.) Clearing land → 1 month

- 2.) Grubbing land → 1 month
- 3.) Water control development → 2 weeks
- 4.) Sand and stone removal → 5-10 years

Before we start sand excavation and removal, we will have to control any surface water and run-off that may arise to ensure of zero erosion. This will be done by grading the quarry towards ditches that will be excavated. Ditches will be excavated so they bring the water to a small detention pond that will be excavated at the low point of the site. The water will be contained in the detention pond to ensure of zero water run off onto any bounding land. The water that settles in the detention pond will percolate through the existing ground (bottom of the detention pond). The water will not run any further than the detention pond.

We estimate that this proposed quarry has a maximum expectancy of 10 years, depending on the depth of sand over the entire area. As mentioned before, the sand excavation will be limited by any underlying bedrock or groundwater encounters. We would plan to clear and grub the majority of the land at the beginning of the development. Then follow by stripping the overburden to reach the sand and stone layer. The overburden will be stockpiled on site, we will then re-use the overburden material to rehabilitate the quarry when the sand layer has been removed. This will allow for close to the original topography, and natural vegetation growth.

We intend to start development in the proposed quarry by May 1st, 2018. This will allow us to produce sand and stone for the beginning of the construction season and meet public demand. We will also be producing winter sand for the Department of Transportation and Works for the upcoming winter season.

Construction methods could produce sorts of pollution, but you have to monitor it closely and minimize it as much as possible. Here are the following pollutants that may need to be controlled and monitored:

- 1.) Noise pollution → Diesel engines will create a noise that may be referred to as a pollutant. In our case, the proposed quarry is out of the way from any public activity, or housing. To be exact, the nearest dwelling is located 0.84km northeast from the northeast corner (Coordinate #2 in figure 5) of the proposed quarry, on the east side of the Foxtrap Access Road. The driveway for that dwelling is located 0.46km from the gravel access road that we plan to use. There will be minimal disruption or interference in the proposed location, if any at all. To be preventive of any noise complaints, we can monitor the noise by use of a



handheld device that detects and measures noise capacity in decibels. The proposed quarry is also in a valley, and drops approximately 25m in elevation compared to the gravel road intersection with the Foxtrap Access Road. This valley will also act as a bowl and contain the majority of any noise created. Winds should not carry any noise production in this location.

- 2.) Air pollution → Typical diesel engines also give off exhaust fumes, which may be referred to as a pollutant. A lot of new heavy equipment is equipped with “Final Tier 4” engines which meet the latest emission tests and standards. Apparently giving off ZERO emissions.
- 3.) Dust pollution → We do not believe that dust will be a factor whatsoever in this quarry operation. Crushers, screening plants or wash plants will not operate in this quarry. This quarry will be used strictly as a source. The sand and stone source will be hauled to our crushing and screening operation, which is on Incinerator Road in Foxtrap. If any dust arises, which is unlikely it will only be from trucks driving in the quarry. This will be monitored by the Foreman on site and can be controlled by using calcium.

If any pollution concerns arise from any liquids, they will be dealt with on site with the appropriate spill kits and disposed of in a legal manner. Solid waste/garbage will also be collected in bins provided and disposed of in a legal manner. Absolutely no littering will be permitted on the quarry site.

We do not believe that any potential causes of resource conflicts will arise.

#### (iv) Operation:

The work in this quarry will be performed by both young and experienced operators who have the interest in this field of work. Those who will provide production to suit the supply and demand of the industry.

It will mostly consist of heavy equipment such as excavators, dozers, loaders, dump trucks and semi-dumps. Any crushers, screening plants or wash plants will not be operated in this quarry.

The land will first be cleared by appropriate means to salvage any usable timber, then grubbed by excavators, and dozers.

Once the land is cleared, grubbed, and the overburden/topsoil is stockpiled, we have the following process as to how the final sand and stone products will be made:

- 1.) Excavate sand and stone layer from proposed quarry.
- 2.) Load sand and stone into dump trucks, semi-dumps.
- 3.) Haul sand and stone into our quarry on Incinerator Road.
- 4.) Crush, wash, produce final sand and stone products at our production operation.

A water supply for washing will not be required in this quarry. No crushing, screening or washing equipment will be operated. Water will be supplied for the employees for drinking, washing, and safety practices.

This quarry operation will be a seasonal site, from April to October depending on weather conditions. It will run five to six days a week, 7:00am - 6:00pm depending on demand from our customers.

Looking to the future, we expect this seasonal quarry operation to give us a maximum of 10 years in sand production.

Please see the "(iii) Construction" section of this EA registration for the pollutants, and resource conflicts.

(v) Occupations:

Due to this operation being heavy equipment based, we will require multiple positions to be filled in order for operations to run efficiently. The number of employees required for the construction and operation of this quarry site are as follows:

- Heavy Equipment Operators → 3-5
- Truck Drivers → 3-5
- Foreperson/Safety → 1
- Heavy Equipment Mechanic → 1

Based on the National Occupation Classification 2006

(<http://noc.esdc.gc.ca/English/NOC/Occupations.aspx?val=7&ver=06>), the following is an enumeration and breakdown of occupations anticipated for this quarry to operate efficiently:

- 7421 - Heavy Equipment Operators (Except Crane) → 3-5
- 7411 - Truck Drivers → 3-5
- 7217 - Contractors and Supervisors, Heavy Construction Equipment Crews → 1
- 7312 - Heavy Duty Equipment Mechanics → 1

As stated before, this quarry operation will be a seasonal operation from April to October depending on the product demand. We anticipate that we will get a maximum of 10 years removing sand and stone from this quarry site.

All hiring will be carried out directly through Clarke's Trucking and Excavating Limited, all employees will be hired to work for this company. We are highly capable of operating this quarry site efficiently to meet the production required for our customers.

Nor age or gender are contributing factors in the hiring process at Clarke's Trucking and Excavating Limited. Our hiring process is simply based off of the best-suited resumes and interviews to meet the standards we require.

Male or Female or other genders will be treated the same way in both the hiring process, and employment process if the person(s) is successful. If a male, female or other gender person is successful in the hiring process, appropriate utilities will also be in place for their workplace (portable toilets, etc.).

#### (vi) Project Related Documents

The following is a short list of websites and programs that has been used and referenced to complete this EA registration:

- 1.) <http://noc.esdc.gc.ca/English/NOC/Occupations.aspx?val=7&ver=06>
- 2.) <http://www.exec.gov.nl.ca/exec/wpo/genderbased/index.html>
- 3.) <http://www.sustainablebuild.co.uk/pollutionfromconstruction.html>
- 4.) Google Earth.
- 5.) NL GeoAtlas.

Besides the information given from the websites and programs listed above. This report has been written in conjunction with the knowledge of the staff at Clarke's Trucking and Excavating Limited.

#### **APPROVAL OF THE UNDERTAKING**

The following is a list of the approvals and permits required to commence construction at the proposed quarry:

- A release from the Minister regarding this EA registration.
- A release from the federal government, if required.
- Approvals from all provincial government departments that are included in the referral/approval staging.
- Approval from the City of St. John's due to the quarry location being located inside the City boundary.
- Issuance of the Quarry Permit from the provincial government (Mines/Natural Resources).

## **SCHEDULE**

In order for our quarry operation to be successful in the 2018 construction season, we would prefer to have operations commence by May 1st, but definitely no later than June 1st.

The reasons being that if we commence construction on May 1st, it may take up to the beginning of June before we can produce our final sand and stone products. This is required to be ahead of our demand from customers, and to meet deadlines for winter sand contracts with Transportation and Works.

If we do not receive approvals until June 1st to commence construction, we will not be able to tender on winter sand required by the Department of Transportation and Works and surrounding municipalities. This will cause a loss in revenue.

## **FUNDING**

Our company will be providing all funding to develop the quarry and recoup the money from sand and stone sales.



Kyle Clarke

Clarke's Trucking & Excavating Limited

