

**ENVIRONMENTAL ASSESSMENT
REGISTRATION DOCUMENT**

Hickey's Contracting (1989) Ltd.

**Proposed Sand & Gravel Operation located due northwest from the
Burin Peninsula Highway, 1.5 km north of R210 & R211, Terrenceville
Intersection**

Department of Natural Resources (DNR) File Ref # 711:8421

October 15, 2018

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1.0 Undertaking Title

Terrenceville Sand & Gravel Quarry, Burin Peninsula, (DNR File #711:8421)

2.0 Proponent

2.1 Corporate Body Title

Hickey's Contracting (1989) Ltd.

2.2 Address

P.O. Box 8
Terrenceville
Fortune Bay, NL
A0E 2X0

2.3 Principle Contact Person

Mr. John Hickey
Phone: John Hickey (709) 662-2314
P.O. Box 8
Terrenceville
Fortune Bay, NL
A0E 2X0

3.0 The Undertaking

3.1 Undertaking Title

Terrenceville Sand & Gravel Quarry, Burin Peninsula, (DNR File #711:8421)

3.2 Purpose/Rationale

The purpose of this project is to secure an additional quality source of raw aggregates (sand & gravel) to provide various products to clientele and stakeholders. Such products will include winter sand and backfill and will satisfy the requirements of The Department of Transportation and Works, various contractors, local Towns of Terrenceville, Grand Le Pierre, and English Harbour East, and the general public. Securing additional sources of material is also critical to the success and longevity of the family business.

4.0 Description of the Undertaking

4.1 Geographical/Physical Location/Access

The proposed quarry is located approximately 1.5 kilometers north of Route 210 (Burin Peninsula Highway) & Route 211 (Terrenceville-Grand Le Pierre) Intersection. This is located in the Electoral District of Placentia West-Bellevue, NTS Map Sheet 1M/10 (Figures 1-3). The UTM coordinates (Nad 83) outlining the proposed undertaking are provided on Figure 8. There are no Municipal Controls in effect for this area.

Access to the site in the past was via an existing road that travelled through the Transportation & Works (T&W) Depot (see Figure 4). On or about 2011, due to safety concerns for employees and security of the depot property, T&W advised the Department of Mines and Energy (at the time) that approval to access quarries through the Depot property would have to cease and an alternative “new” access would be required. Hickey’s Contracting (1989) Ltd. has approval from the Department of Fisheries and Land Resources (Crown Lands) for a Permission to Occupy (PTO) to construct the “new” access (Appendix A)

4.2 Physical Features

4.2.1 Site Description

The proposed site comprises an area of 5 hectares. The northern boundary of the site shares a common boundary with an existing quarry permit issued to Dean Clarke comprising an area of 1.5 hectares (DNR File #711:10127). Along the western boundary of the site, running north to south, there is a stream. A 30 metre parallel buffer will be maintained at all times between the quarry working area and the stream or as directed by the Department of Environment and Wildlife (Water Resources). A permit will also be required from Water Resources to alter a body of water (install a culvert) to access the site from the existing disturbed area. A new access of approximately 95 metres will also need to be constructed to access the site (figures 5 and 7).

The quarry site is situated approximately 900 metres North West of the Burin Peninsula Highway and 1.5 kilometres north of the Terrenceville, Grand Le Pierre Access. The existing T&W, highway Depot is approximately 1.3 kilometres south of the proposed quarry. No buildings will be constructed at the site.

As referenced in this document, access to the site will be via a new road construction (Figures 5 and 6). Approval has been acquired from Crown Lands to construct this new access that is approximately 436 metres in length and will

be constructed off Route 211. Should approval or some other arrangement be made with T&W, new road construction may not be required.

4.2.2 Physical and Biological Environment

There are seven physiographic regions that cover Canada. Of particular interest for this project is the Appalachian Region which covers Newfoundland and Labrador and the Maritimes.

Ecologically, the area is located in the Maritime Barrens eco-region of Canada. The eco-region is categorized as by having cool, foggy summers and short relatively moderate winters along the coast and colder inland. Mean annual temperature is approximately 5.5°C. The mean summer temperature is 11.5°C and the mean winter temperature is -1°C. Given the location of the proposed site, plant species are typical of boreal forest species of this eco-region. Vegetation consists of low lying scrub, mosses and lichens. The topography consists of undulations, with minimal change in elevations. Trees are virtually non-existent, except closer to the Burin Peninsula Highway. This aids in reducing the visual impact of the operation to the travelling public and tourists.

Typical wildlife found in this area consists of moose, hare, lynx, fox, mink, coyote, ducks and black bear along with a variety of bird species and other small creatures.

4.3 Development

4.3.1 Site Access

As described previously, access to the site will be via new road construction as permitted by Crown Lands PTO. This access will be constructed off Route 211 and will be approximately 436 metres long. The access will run in a south west to north east direction (Figures 5 and 6). Currently no through fare is permitted on the T&W Depot property. Should approval be acquired from T&W to access the quarries, then new road construction (436 metres) would be eliminated.

Once access has been established from the road, a second access of approximately 95 metres will be required to access the actual quarry site from the existing disturbed quarry area (Figure 7). This constructed road will run in an east-west direction and will require a stream crossing. A permit from water resources will be required for this work.

4.3.2 Clearing

This site is void of trees. Should any clearing be required, all associated permits required from the Department of Fisheries and Land Resources (Forestry and Agrifoods), namely cutting and operating permits, will be obtained.

4.3.3 Grubbing

All surface organic material including moss, peat and topsoil shall be stripped and stockpiled at the perimeter of the quarry for future use in rehabilitating the quarry once all resources have been exhausted.

4.3.4 Quarry Development

The quarry site comprises an area of 5 hectares. Hickey's Contracting (1989) Ltd. formerly held quarry permits for this site from 2008-2011 consecutively. The site was not developed during that time frame as it was obtained to secure future reserves. The denial of access through the T&W Depot property prevented Hickey's Contracting the opportunity to develop the site.

Development will commence at the western boundary and continue to be worked in an easterly direction. This will also aid in shielding the operation from the Burin Peninsula Highway (Route 210). The operation is not visible from Route 211. Initial activities will be confined to stripping and stockpiling overburden for future rehabilitation requirements as set forth by the Quarry Materials Act, Quarry Materials Regulations and Terms and Conditions added to the permit. Sloping of the quarry and access road will be crucial in eliminating the possibility of debris (silt, sediments) from being deposited into the stream. Silt screens will be available should the need arise during periods of intense rainfall to prevent siltation of the stream.

Stripping operations will be limited to production requirements for the current operating season. This will help prevent erosion and siltation of nearby water bodies. The amount of work (contracts) secured will determine the area required to be cleared annually.

The anticipated start date shall depend on permit approval. Should the permit be approved early in the calendar year, anticipated start date shall be upon receipt of the permit (2018). If the permit is issued later in the year, work may be delayed and shall commence spring of 2019.

4.4 Potential Sources of Pollution during Construction and Operation

The construction and operating phases of the development of the quarry shall involve noise, dust, human waste, litter, heavy equipment emissions, possible siltation as a result of drainage slopes, and possible accidental equipment leaks.

4.4.1 Noise and Emission Controls

Heavy equipment, namely dump trucks, excavators, loaders and screeners can produce increased noise, emissions levels and dust. Though this is not preventable, it can be minimized.

Some mitigative measures to be utilized during this project are:

1. All commercial equipment are fitted with functioning mufflers and pollution control devices.
2. All vehicles have functioning air conditioning. This eliminates the need to roll down the windows in a dusty environment.
3. All staff required to wear proper Personal Protective Equipment (PPE) as per Workplace NL guidelines.
4. Hickey's Contracting (1989) Ltd. is COR Certified. Machinery must be kept in good working order at all times.
5. Site is not located near any community or Town. No residences or dwellings nearby.
6. Water application shall be introduced to control dust, should the need arise.

4.4.2 Waste Materials

Development of the quarry will result in generating waste and litter. Given the isolation of this quarry site, to address this issue, the following will be introduced:

1. A fully functioning mobile travel trailer will be set up on site. This will provide washroom facilities and shelter should the need arise.
2. All on-site waste material, including lunch waste, will be securely contained so as not to attract nuisance wildlife to the site and will be removed to an approved waste disposal site on a weekly basis.

4.4.3 Site Run Off

Construction activities yield the potential of sediments such as silts, clays and other small particles to be carried during heavy precipitation events. This is due to the vegetation cover being stripped and the sediments being exposed to the elements. Such events can be managed by the following:

1. Minimize stripping the area of the site to what is required for the season. Less area exposed results in fewer materials exposed and susceptible to heavy precipitation events.
2. Ensure that the sloping of the area is controlled to prevent sediments from reaching outlets.
3. The use of silt screens installed across culverts, streams or other routes will help prevent sediments from entering water bodies.

4.4.4 Accidental Fuel Leaks/Equipment Failure

During construction activities there is a possibility of equipment failure. This may result in fuel/oil spills and other hydrocarbons. In addition to adhering to the conditions implemented by the Department of Service NL, the Company will implement the following mitigative measures:

1. Being COR Certified, all equipment must be regularly serviced and maintained.
2. Adhering to all Government Regulations, more particularly those imposed by Service NL pertaining to the handling of fuel.
3. Spills in excess of 70 litres and all leaks will be reported immediately to the 24-hour spill-report number (call 709-772-2083) or 1-800-563-9089.
4. All spills and leaks, regardless of volume, will be cleaned up immediately and the affected area shall be inspected and given clearance by Service NL prior to resuming activities.
5. Sufficient spill-response material (oil-absorbent pads and powder) will be available on site to clean up small spills.
6. Company has a dedicated safety officer on staff trained in the use of spill kits and emergency measures.

4.5 Operation

The operation of the quarry is a continuation of the quarry development stage. Once the site has been cleared and grubbed, and all preparation work has been completed, aggregate extraction can commence.

The development of a vertical face shall be utilized to obtain raw aggregates. Face heights will not be greater than 5 metres as per the Terms and Conditions set forth by the Department of Natural Resources (Mineral Lands Division). A loader or excavator is used to transport the material from the face to the screener. Materials are then sorted into various gradations by a conveyor belt system to meet contract specs or customer requirements.

As the screener sorts the aggregate into various piles, a loader is then used to stockpile these various gradations in another area of the quarry. This product is then available to the consumer for purchase. Some companies may purchase the material and transport using their own dump trucks, while winter sand may be transported by the quarry permit holder. Residential customers will require delivery of product as well and this is transported primarily by the permit holder or hired help.

This undertaking is a sand and gravel operation. No drilling and blasting will be conducted and no crushing operations are required.

Equipment to be used during the operation phase:

1. Dump trucks (4)
2. Excavator (1-2)
3. Loader (2)
4. Screener

4.6 Addressing Potential Resource Conflicts during Operations

There is minimal resource conflicts associated with this location. The stream located to the west is the only concern of this nature. Proper environmental protective measures and buffer zones will alleviate any potential negative effects. Other measures to prevent damage to the stream are:

1. Ensure 30m buffer maintained from the stream at all times or to that specified by Water Resources.
2. Use of silt screens to prevent siltation of water bodies.

3. Stripping only that portion of the site required for annual production volumes.
4. Spill kits on site at all times and trained personnel in the use of spill kits.
5. Waste/litter to be removed daily.
6. Facilities to accommodate human waste and follow Provincial waste disposal laws.

4.7 Rehabilitation and Closure

To be conducted in accordance with the Quarry Materials Act, SNL1998, Quarry Materials Regulations and the Terms and Conditions of a quarry permit as imposed by the Department of Natural Resources, Mineral Lands Division. This involves sloping criteria, re-spreading of organics to promote rapid regeneration of vegetation and leaving the site clean free of refuse and safe.

4.8 Occupations (NOC Codes)

This project is expected to hire the following occupations as in accordance with the National Occupational Classification.

1. 4 dump truck drivers (7511)
2. 3 Heavy Equipment operators ; 1 loader, 1 excavator, 1 screen operator (7521)
3. 1 Labourer (7611)
4. 1 Safety Officer (2263)

Hickey's Contracting (1989) Ltd. is an equal opportunity employer. Hiring is based on the most qualified persons as required depending on work load and contracts secured for the season.

4.9 Project Related Documents

Permits required for the project:

1. Quarry Permit, Department of Natural Resources, Mineral Lands Division
2. Permission to construct a road, Crown Lands
3. Cutting and operating permit, Department of Fisheries and Land Resources (Forestry and Agrifoods)
4. Permit to alter a body of water, Water Resources

Other permits and approvals may be required. This will be determined through the referral process prior to the approval and issuance of the quarry permit. No activity can commence until all authorizations have been obtained.

5.0 Approval of the Undertaking

Approvals are required from the following Departments for the project to proceed:

1. Crown Lands
2. Department of Natural Resources, Mineral Lands Division
3. Transportation & Works
4. Fisheries and Land Resources (Crown Lands)
5. Fisheries and Land Resources (Forestry)
6. Tourism, Culture, Industry & Innovation (Tourism)
7. Tourism, Culture, Industry & Innovation (Historic Resources)
8. Municipal Affairs and Environment (Provincial Planning)
9. Department of Environment and Wildlife (Environmental Assessment)
10. Service NL
11. Department of Environment and Conservation (Water Resources)

6.0 Schedule

Quarry Permit application submitted March 28, 2018

Environment Assessment document to be submitted April 2018

Commence operations immediately once approvals and permits have been obtained. Should this process be delayed, project may be postponed until spring 2019.

7.0 Funding

Funding for the project will be solely 100% by the proponent.

8.0 Submission

Date:

Signature:

Name:

Position:

Appendix A

Figure 1



Figure 2



Figure 3

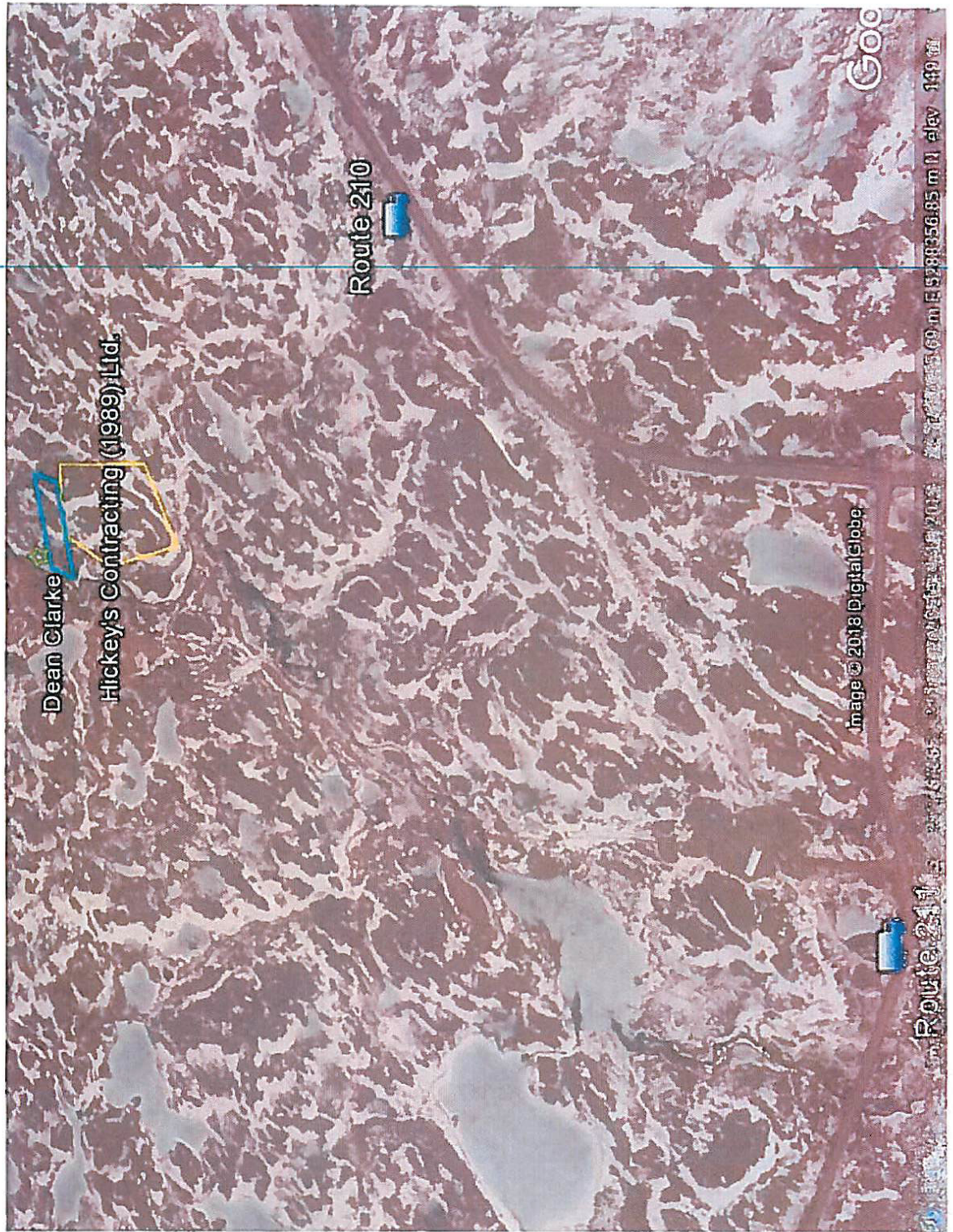


Figure 4



Figure 5

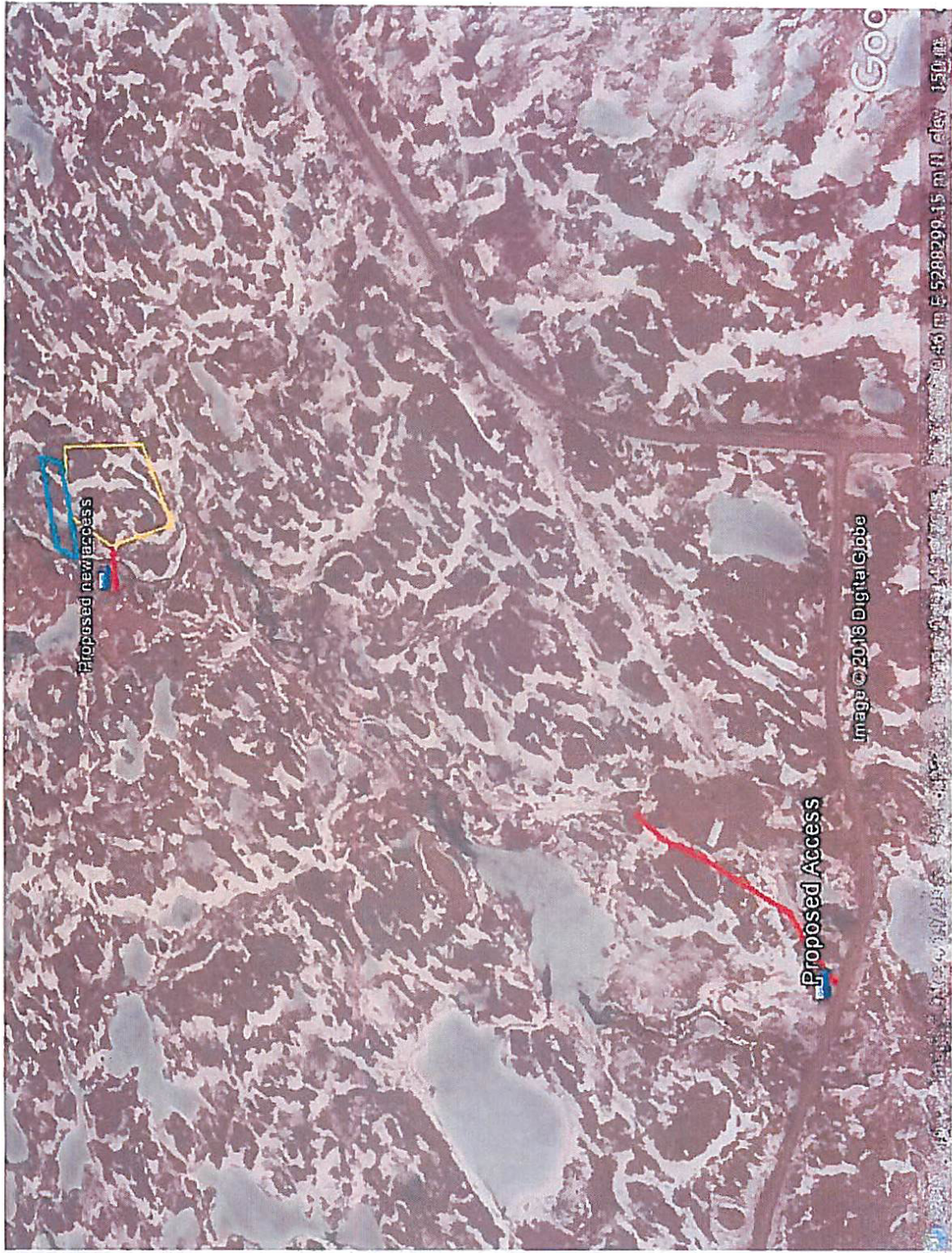


Figure 6



Figure 7

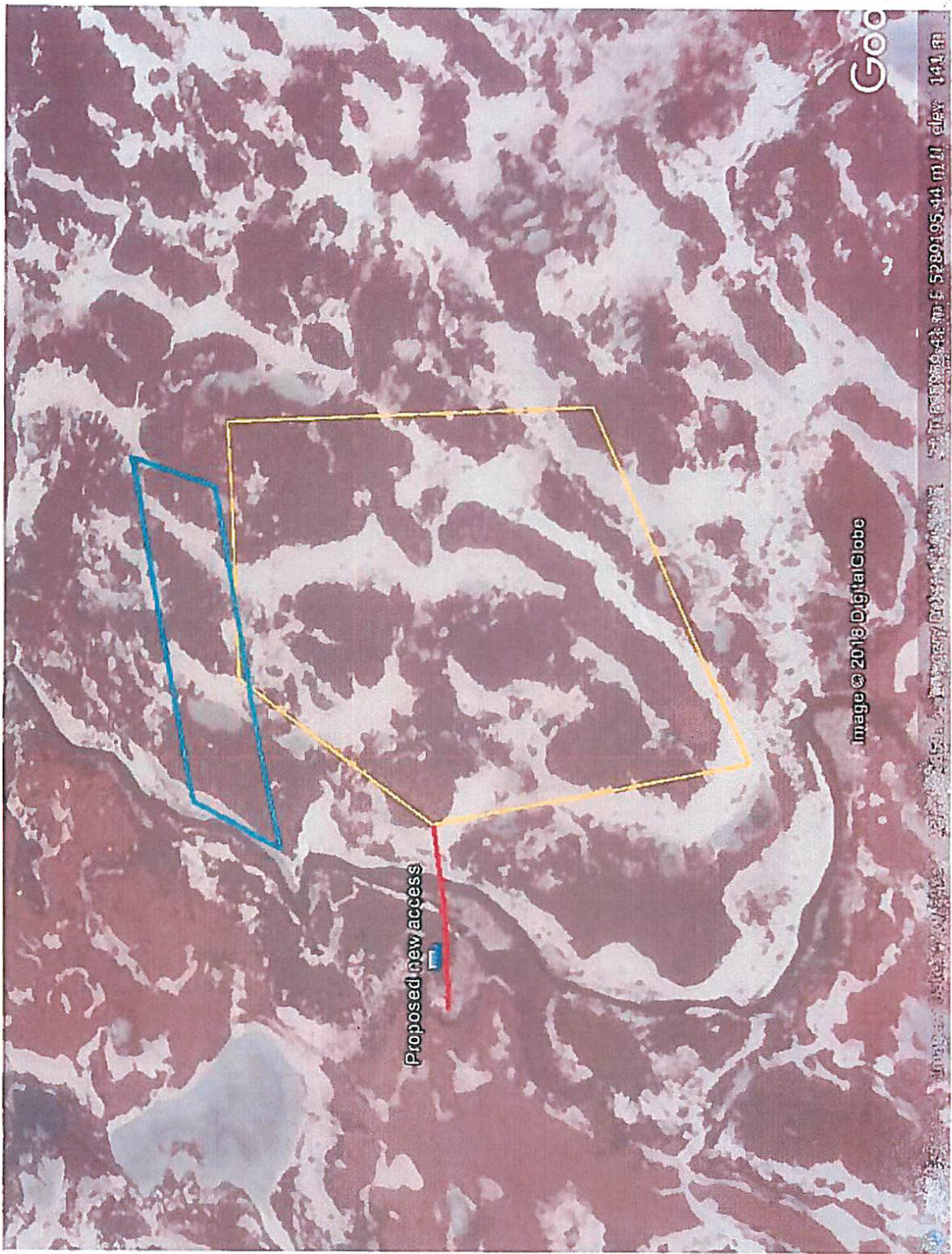


Figure 8



Appendix B

Confirmation of Receipt of Crown Land Application



Government of Newfoundland and Labrador
Department of Environment and Conservation

Lands Branch
Eastern Regional Lands Office

In Reply Please Quote
File Reference No.

JUL 25, 2012

1017696

JOHN HICKEY
Box 8
Terrenceville NL
A0E 2X0

Dear Sir/Madam:

RE: APPLICATION NO.: 141289
TYPE: Permission to Occupy
PURPOSE: Access quarry permit
LOCATION: English Harbour East Access Road

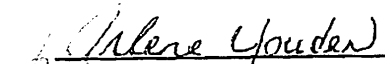
This will acknowledge receipt of the above referenced application for a Crown title. The application has now been registered and via a copy of this letter, the Department and/or agencies on the attached schedule have been asked to forward their comments and recommendations on your application to the Regional Lands Office.

Your application will be reviewed and a final decision will be made when the recommendations have been received from these Departments and/or agencies.

To assist inspectors in locating the area applied for and to avoid delays in processing your application it is advisable to place your name and application number on the site. Your application is being processed for the site indicated on the attached map.

Please note that the land is not to be occupied until you receive a fully executed title document. If you require any additional information concerning the processing of this application please contact the Regional Lands Office at the address below.

Yours truly,

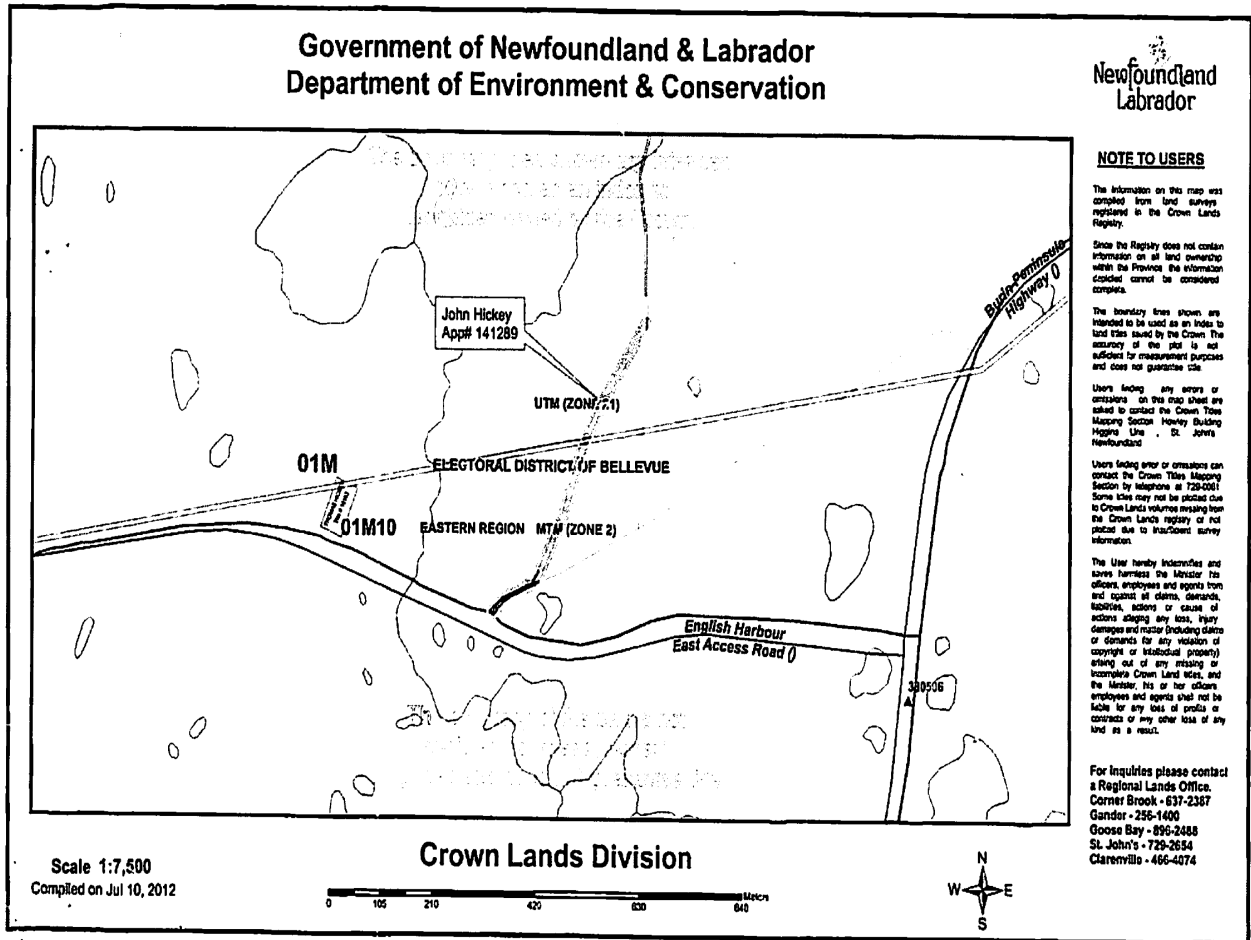

LANDS OFFICER
Attachment(s)

SCHEDULE OF REFERRAL AGENCIES

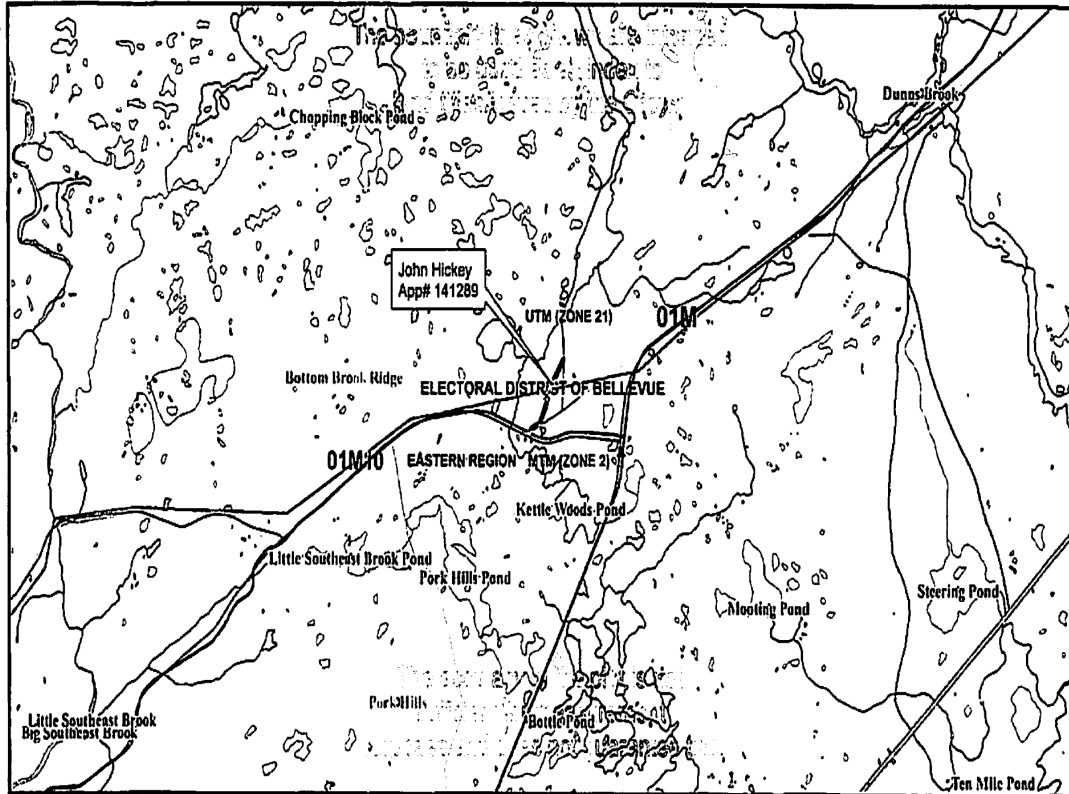
Name:	Phone Number:
Dept. of Environment & Conservation Rob May, Lands Branch	709-466-4073
Dept. of Transportation & Works Janet Howse Clarenville Depot	709-466-4131
Dept. of Government Services Government Service Centre (CLar)	709-466-4060
Dept. of Natural Resources ED STEWART Forestry Branch	709-466-7439
Dept. of Natural Resources Heather Hickman, Mineral Lands Division	709-729-6408
Dept. of Environment & Conservation Environment Assessment Division	709-729-4211
Historic Resources Martha Drake Historic Resources Div.	709-729-2462
Nf Power Brian Smith	709-737-2886

Appendix C

Location Maps of Proposed Access



Government of Newfoundland & Labrador
 Department of Environment & Conservation



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, Herby Building, Higgins Lane, St. John's, Newfoundland.

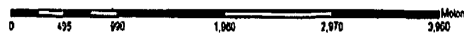
Users finding errors or omissions can contact the Crown Titles Mapping Section by telephone at 729-4001. Some sites may not be plotted due to Crown Lands volumes missing from the Crown Lands registry or not plotted due to insufficient survey information.

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 arising, in any way, from any damages and losses (including claims or demands for any violation of copyright or intellectual property) arising out of any missing or inaccurate 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:
 Corner Brook - 537-2387
 Gander - 256-1400
 Goose Bay - 838-2488
 St. John's - 729-2654
 Clarenville - 466-4074

Scale 1:35,000
 Compiled on Jul 10, 2012

Crown Lands Division



Appendix D

Confirmation of Proposed Access Still Required



Government of Newfoundland and Labrador
Fisheries and Land Resources

In Reply Please Quote
File Reference No.
1017696

FEB 11 2018

JOHN HICKEY
Box 8
Terrenceville NL
A0E 2X0

Office Copy

Dear Sir/Madam

RE: APPLICATION NO.: 141289
TYPE: Permission
PURPOSE: Access quarry permit
LOCATION: English Harbour East Access Road

This letter is in reference to the above mentioned application. This office has recently been reviewing applications that have been inactive for some time. A review of your file has determined such is the case with your application.

This office can only assume that you are no longer interested in obtaining title to this parcel of Crown land, therefore your application is now considered cancelled and your file closed

If you have any information to the contrary you must contact this office in writing or by fax within thirty (30) days from the date of this letter or this office will begin accepting applications from other individuals who may be interested in this site. Our fax number is 729-0726.

Yours truly;

[Signature]
Lands Officer

Replying to above, I'm still interested in the above application no. 141289, an access road has to be constructed, which I'm hoping will happen in the near future.

Box 8700, St. John's, NL, Canada A1B 4J6

John Hickey
Feb 22 - 2018