

Environmental Assessment Registration Document

White Hill Pond FEL Quarry

Submitted to:

Minister of Environment and Climate Change

P.O. Box 8700

St. John's, NL A1B 4J6

Attention: Director of Environmental Assessment

Prepared By:

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Contents

List of Figures	2
1.0 Name of Undertaking.....	3
2.0 Proponent	3
2.1 Name of Corporate Body	3
2.2 Address.....	3
2.3 Chief Executive Officer	3
2.4 Principal Contact Person	3
3.0 The Undertaking.....	3
3.1 Nature of the Undertaking.....	3
3.2 Purpose of Undertaking	4
4.0 Description of the Undertaking.....	5
4.1 Geographic Location	5
4.2 Physical Features.....	6
4.2.1 Vegetation	7
4.2.2 Wildlife	7
4.3 Construction of Quarry	7
4.4 Operation of Quarry.....	8
4.4.1 Occupations	9
4.4.2 Decommissioning and Rehabilitation.....	10
4.5 Potential Sources of Pollution	10
4.5.1 Noise Pollution	10
4.5.2 Air Pollution.....	11
4.5.3 Fuel.....	11
4.5.4 Visibility.....	11
4.5.5 Runoff.....	17
4.5.6 Garbage Disposal	18
5.0 Potential Resource Conflicts	18
6.0 Regulations and Approvals.....	18
7.0 Schedule.....	19
8.0 Conclusion.....	19
APPENDIX A – Site Location Detail.....	21
APPENDIX B – Site Access Approval.....	24

List of Figures

Figure 1: Proposed Site Location in Conception Bay South Newfoundland	6
Figure 2: Site Plan for Project.....	9
Figure 3: View of the Proposed Site from Conception Bay South on Route 2 around Lawrence Pond Road Interchange. The Yellow Area Above is the Site (Coordinates Lat 47.474 Long -53.050).	13
Figure 4: View of the Quarry from Peacekeepers Highway (Coordinates Lat 47.454 Long -53.067).....	14
Figure 5: Shows the Visibility of the Quarry from the Town of Seal Cove – Daniels Road (Lat 47.446 Long -53.070)	15
Figure 6: View of Quarry from TCH Soldiers Pond (Lat 47.428 Long -52.988)	16
Figure 7: View of Quarry (in Yellow) from the top of Butterpot Mountain (Lat 47.402 Long -53.088)	17
Figure 8: Site Plan for New Quarry and Access Road.....	22
Figure 9: Proposed Location Overview	23
Figure 10: Communities Surrounding Proposed Quarry.....	23

1.0 Name of Undertaking

White Hill Pond FEL Quarry

2.0 Proponent

2.1 Name of Corporate Body

Farrell's Excavating Limited

2.2 Address

P.O. Box 909

Mount Pearl, NL

A1N 3C8

2.3 Chief Executive Officer

William Farrell (President and CEO)

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2.4 Principal Contact Person

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3.0 The Undertaking

3.1 Nature of the Undertaking

Farrell's Excavating Limited (FEL) is applying for a new sand and gravel quarry located in Conception Bay South Newfoundland. The desired area for the quarry is approximately 16.5 ha with dimensions of 515m by 310m. This undertaking will be developed under a quarry permit (71111809) for sourcing sand and gravel and will provide FEL with the ability to continue their current operation located near Paddy's Pond

which services the Avalon with quality aggregate for various construction projects. Any resource conflicts that occur during the extraction process will be analyzed and assessed, if conflicts make the quarry unsuitable for Farrell's Excavating Limited's needs, then they will proceed with decommissioning and rehabilitating the quarry to as much of its natural state as possible. Access to this quarry will be a 260m long access road from *Ryan's Road* just to the North of the proposed quarry location, FEL has permission to use *Ryan's Road* (See Appendix B) for their access to the land and no changes or upgrades need to be made to the road. See Figure 8, in Appendix A for the site plan and location of the access road.

3.2 Purpose of Undertaking

Farrell's Excavating Limited is a well-established construction company that has been in business since 1992 currently with a Quarry, Office, laydown yard, Aggregate Rock Crusher and Asphalt Plant near Paddy's Pond. The current quarry they are using is nearing the end of its production life warranting the need of another usable quarry in the vicinity that they can continue the province with quality products for years to come. The materials from this site will be excavated and processed to be suitable in Concrete, Asphalt and aggregate sources for use and sale across the province.

Farrell's Excavating Limited employes over 400 people annually, completing various heavy civil projects ranging from highway construction and redevelopment to commercial and residential paving. Farrell's Excavating Limited will bring their aggregate processing equipment to the site once approved and will be producing quality sand and gravel for their projects and sale. This will prevent unprocessed material being transported to their other quarry for processing, increasing public safety and reducing their carbon footprint.

The Proponent will be processing the raw material into various types of aggregate commonly used in highway and residential construction such as blending sand, winter sand, Class A, Class B, ¼ inch stone, ½ inch stone, ¾ inch stone, 1.5-inch stone, 3 inch minus, 4 inch minus, blast rock and armor stone.

4.0 Description of the Undertaking

4.1 Geographic Location

The undertaking is approximately located 1.78km southwest of Route 60 Seal Cove near “Harris Rebar”.

This area currently has several other approved quarries nearby and copious amounts of undeveloped crown land as well as a body of water (White Hill Pond) located approximately 75m from the proposed quarry, there are no other major developments in the area. There are no other preferred locations for this quarry pit as this area is the closest suitable location which will produce the most raw material to be utilized. Any location further away or with lower potential volume will cause for increased prices in the materials for consumers.

The adjacent land to the undertaking is currently being used as other approved quarries of comparable size and usage. The new quarry development will provide an amplitude of raw material to be processed into suitable aggregates for use in construction and has potential to supply sufficient material for a 25-year plus lifespan. This application area lies within the Town of Conception Bay South boundary (Rural Zone), in the land use zone under the Butterpot-Witless Bay Line Environs Development Control Regulations and within a domestic wood cutting area as per the Department of Fisheries, Forestry and Agriculture. This site is in the Maritime Barrens Eco-Region in Conception Bay Newfoundland it generally has cool summers with rain, fog and high winds with temperatures averaging 14 degrees Celsius followed by mild winters with an average temperature of -1 degrees Celsius. This geographical area sees a yearly precipitation of 1500mm with elevations ranging from sea level to just over 250m. The area contains a great abundance of sedimentary and granite rock as well as sand and gravel sources. Please see *Figures 8 and 9* in Appendix A along with *Figure 1* below for site location images.

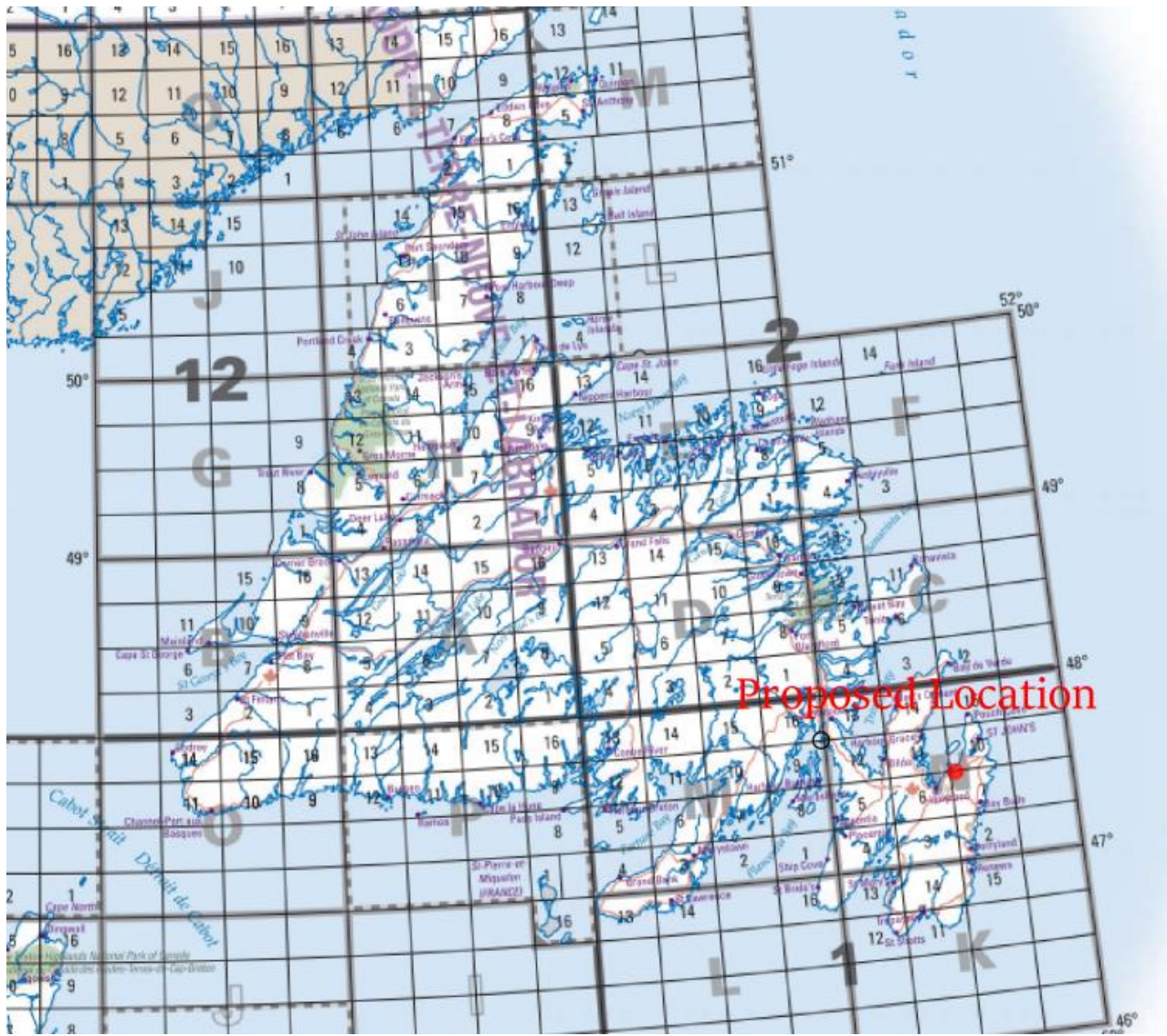


Figure 1: Proposed Site Location in Conception Bay South Newfoundland

4.2 Physical Features

The proposed location of the quarry is a densely wooded area that is steeply graded to the South/Southeast direction. White Hill Pond is located approximately 75m from the southern portion of the property boundary which will not be impacted by the quarry operations. The Northeast section of the quarry intersects with a wetland area, this will not be disturbed and a 30m buffer will be placed around the wetland section. Quarry Permit 147286 owned by MacMix Concrete Limited is the only facility next to the proposed land, which is approximately 240m to the West, there are several expired

land permits 131765, 124641, 108684, 147395, 131922 and 145896 which are 245m, 285m, 350m, 340, 360m and 460m from this property respectively.

4.2.1 Vegetation

This region has dense forests mainly containing balsam fir and black spruce with white and yellow birch sparsely throughout. Young alder growth can be noticed along streams and rivers. The barren land consists of thick low-lying bushes and shrubs such as Dogberry, Larch, Partridgeberry, Blueberry, and Crowberry.

4.2.2 Wildlife

Native animals to the region will consist of the Newfoundland Moose, Coyotes, Red Foxes, Squirrels, Mink, Snowshoe Hare. Other Mammals to include would be the Brown Bat, Common Vole, and Shrews. Several Migratory birds have been known to frequent the area including Canadian Geese, Wood Duck, Blue-winged teal, Black Duck, Pintail, Eider, Goldeneye, Merganser, Seagulls, Crows, Bald Eagle, Spruce Grouse, Ruffed Grouse, Rock and Willow Ptarmigan. There will be a temporary loss of habitat for some of the native wildlife in the area but upon decommissioning and the rehabilitation of the quarry's land, their habitat will be slowly regenerated.

4.3 Construction of Quarry

The construction of the quarry will begin by building an access road which will be approximately 260m in length and 10m in width connecting the west side of the proposed quarry to Ryans Road this access road provides the path of least disturbance to the naturally existing topography. This is the path of least disturbance and does not cross any waterways or wetlands and there are no other acceptable areas to gain access to the property. Once approval of the Environmental Assessment is completed FEL will proceed to obtain a license to occupy permit from the Crown Lands Division.

Tree removal and the removal of organic material will occur to expose the raw material. FEL will obtain a Commercial Cutting Permit from the Department of Fisheries, Forestry and Agriculture and will salvage

all usable timber. The organic material will be stockpiled and created into a berm within the lease boundary (around the 30m buffer for the wetland) to be later used for reclamation and closure of the quarry after all accessible resources have been extracted. All extraction activities will be in accordance with the Occupational Health and Safety Act, and that of the Quarry Materials Act.

The development and construction of the land for the proposed quarry area will consist of the following immediately after approval of the Quarry Permit:

- a) Survey the proposed land.
- b) Clearing of trees and vegetation
- c) Stripping soil and other loose material into a stockpile for rehabilitation upon closure of the quarry
- d) Installation and calibration of weight scales
- e) Installation of aggregate crusher/screeners
- f) Development of settling ponds and sediment control to reduce contaminating runoff.
- g) Various quarry operations: excavation, drilling blasting, crushing and stockpiling of materials.
- h) Transportation of crushed materials to client

The completion of the quarry construction will take approximately 2 weeks.

4.4 Operation of Quarry

When in operation sections of the quarry will be grubbed off and all loose material will be removed exposing the solid rock, drilling and then a blast will occur on the exposed rock. Only small portions of the quarry will be drilled and blasted at a time, enough to crush for the desired amount, if they need 10 000 cubic meters of material for the crusher they'll only blast 10 000 cubic meters. The annual production for this quarry is expected to be approximately 50 000 cubic meters, this material will be

used for sale to other contractors and for Farrell's Excavating Limited's heavy civil projects on the Avalon. Figure 2 below shows an approximate site plan for the quarry.



Figure 2: Site Plan for Project

4.4.1 Occupations

For this site to become operational both during construction and operation it will require approximately 10 full-time employees in various positions such as.

- Heavy Equipment Operators (73400)

- Heavy Equipment Mechanics (72401)
- Quarry Supervisor (82020)
- Laborers/Scale House Personnel (75100)

Half of the 10 full-time positions will be hired, hiring for these positions will be based on job qualifications, education and relative work experience.

4.4.2 Decommissioning and Rehabilitation

At the end of the quarry's life FEL will decommission and rehabilitate the quarry area back to as much of its natural state as possible. FEL will ensure that the area will be sloped and graded in an acceptable manner with no areas for water to build up, the area and will utilize the stockpile of grubbed organic material from the quarry to cover all exposed areas. Once the area is covered in the organic material/topsoil the entire area will be covered in hydroseed to help with the regrowth of vegetation. It is anticipated that this will take approximately 1-2 weeks for FEL to fully decommission the area and to try to achieve as much of the natural state as possible. Once the excavated quarry area is rehabilitated, FEL will develop a natural berm on the access road made of some of the organic material used to cover the quarry to prevent access to the area. FEL does not anticipate having to import materials to complete the rehabilitation of the quarry.

4.5 Potential Sources of Pollution

During the construction and operation of the quarry various types of construction equipment will be utilized such as harvesting equipment, excavators, dump trucks, and bulldozers. These pieces of equipment represent potential noise and air pollution.

4.5.1 Noise Pollution

The development, extraction and processing of the raw material will require the use of heavy equipment and diesel-powered equipment. This should have a noise level very comparable to the existing quarries and industrial businesses surrounding the area, all equipment will be kept in good working order to

prevent excessive noise and all workers will have proper hearing protection on while in the area. To help reduce noise levels from blasting, blast mats will be used to help mitigate the noise produced from this extraction method.

4.5.2 Air Pollution

During normal quarry operations, there is generally dust created which will be mitigated by filter screens on all crushing equipment, access roads to the quarry will be monitored closely and will be watered frequently to keep dust from the equipment travelling to a minimal. All equipment used in the quarry will have all functioning emission control systems to reduce hydrocarbon air pollution.

4.5.3 Fuel

Diesel fuel will be mainly used to operate the equipment to develop the site and process the raw material. The fuel will be supplied by a petroleum company and will be delivered on daily basis and only trained personnel will be refueling. All heavy equipment on site will be in good working order with regular inspections to prevent spills and leaks. All fuel spills greater than 70 liters will be immediately reported to the Provincial Environmental Emergency Telephone Line and cleaned up.

4.5.4 Visibility

The proposed area is located 0.6km from the CBS Highway and the West side of the development and 0.9km from the nearest residential home to the South. The elevation difference between the Town of Conception Bay South and the development are over 100m in difference, having the quarry at a higher location than the community and at such distance will make this location the ideal spot. The North and West side of the development are exposed to the access road and another industrial development (Harris Rebar).

The quarry will be situated and planned for development in a way that will be the least visible to the public and surrounding communities. The topography and existing vegetation that surrounds the quarry will be utilized to its advantage and will be used as a natural barrier, where this is unsuitable, berms

using the natural loose material on site that has to be removed to expose the underlying material will be piled in a strategic manner to be used as a visibility barrier.

The southern edge of the Town of Conception Bay South and motorists traveling along Peacekeepers Highway are going to periodically have partial visibility of the development due to changes in topography. The view of the development will be minimal from these areas as seen in Figures 3, 4 and 5 shown below.

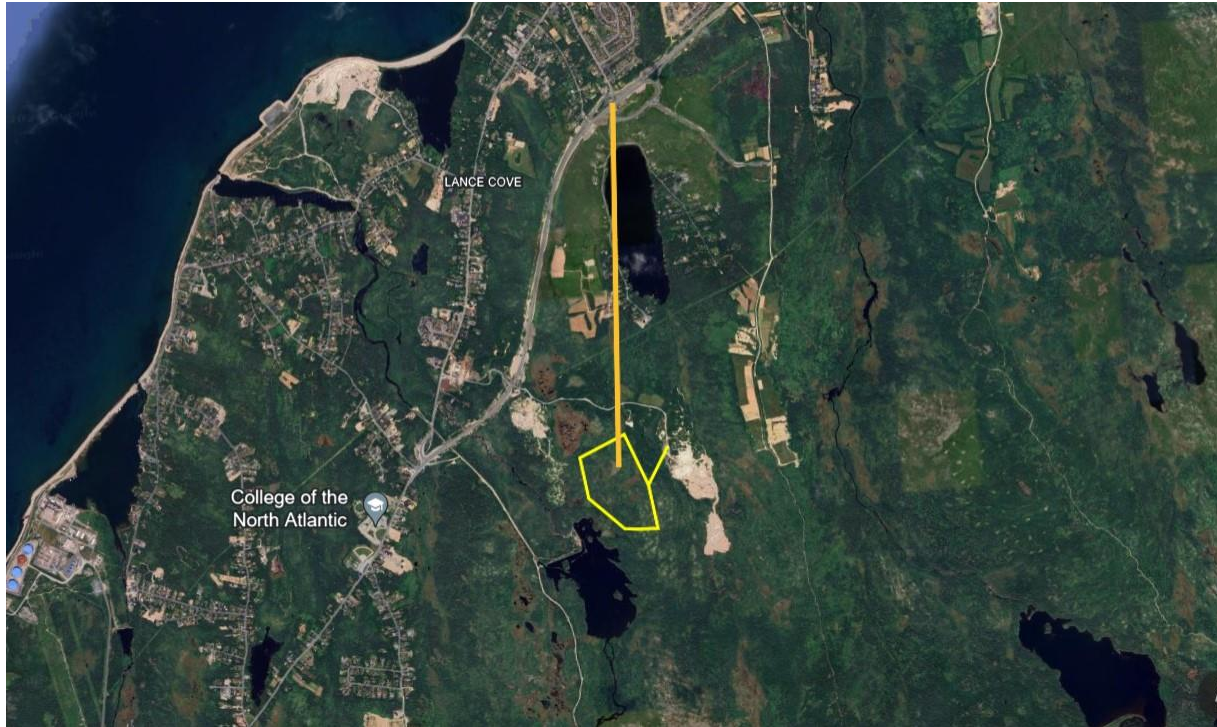


Figure 3: View of the Proposed Site from Conception Bay South on Route 2 around Lawrence Pond Road Interchange. The Yellow Area Above is the Site (Coordinates Lat 47.474 Long -53.050).



Figure 4: View of the Quarry from Peacekeepers Highway (Coordinates Lat 47.454 Long -53.067).

The Town of Seal Cove is located 1.25km to the south of the quarry location at its closest point. The visibility of the site from here will be partial with sightlines of the southern portion of the site being visible. The northern part of the site will not be visible due to the elevation changes and much of the Town having the same elevation as the quarry as shown in Figure 5 below.



Figure 5: Shows the Visibility of the Quarry from the Town of Seal Cove – Daniels Road (Lat 47.446 Long -53.070)



Figure 6: View of Quarry from TCH Soldiers Pond (Lat 47.428 Long -52.988)



Figure 7: View of Quarry (in Yellow) from the top of Butterpot Mountain (Lat 47.402 Long -53.088)

From the figures above we can see that this quarry will pose very little visual pollution to the surrounding area. The majority of the views are just of slivers of the quarry boundary which indicates that this site will be barely seen.

4.5.5 Runoff

While the quarry is in operation there is a potential for runoff, this will be mitigated by the usage of check dam's ditches and silt fence to reduce the number of fine particles eroding away and polluting nearby water sources. These will be in place in areas where excessive runoff is flowing and in areas suggested by the Department. Where applicable, ditch runoff will be directed into vegetated areas for natural percolation and filtration. This will be a main concern during the clearing process, as the natural material will be disturbed causing changes in the percolation and flow of runoff. If a large footprint is developed, FEL will create a settling pond somewhere in the quarry to help suspend the sediments before releasing the water over the vegetation for natural percolation to occur.

4.5.6 Garbage Disposal

All forms of domestic and commercial waste will be compiled into appropriate storage bins to be collected and disposed of at Robin Hood Bay in St. John's, Newfoundland.

5.0 Potential Resource Conflicts

Potential resource conflicts during the operation of the quarry can include wildlife and residential woodcutting. These can be mitigated by proper signage and notification. Although wildlife encounters in the area are expected to be slim, FEL will follow the regulations in the Wildlife Act and all encounters with migratory birds will follow the Migratory Bird Conservation Act. This will ensure that all measures are taken to avoid accidental disturbances of the migratory birds and their breeding grounds.

Pedestrian conflict is not expected to cause any significant disturbances as there currently are no areas which are accessible to the public for hiking, and ATV riding. This area is on a private road and has been used as an industrial area for the last number of years with no reported incidents of conflict, and there are no trail networks/paths that are going to be impacted by this development.

Domestic cutting can proceed in the area without issue, access around the development area can occur. The size of the development area being cleared will not cause any issues to the remaining forestry region, there is plenty of forest for woodcutters to have access to. FEL will also have signage installed informing people about the private property and that there are quarry operations occurring.

6.0 Regulations and Approvals

This quarry development will be in coherence with the Department of Industry, Energy and Technology rules and regulations and of the Environmental Protection Act 2002. FEL will also follow all regulations set out by the Quarry Materials Act and obtain the proper land use permit. A commercial cutting permit,

an operating permit and an access permit will all be acquired from their respective departments before development begins.

Approval Required	Issuing Authority
Quarry Permit	Mineral Lands Division, Department of Industry, Energy and Technology
Operating Permit, Development Permit	Department of Fisheries, Forestry and Agriculture
Commercial Cutting Permit	Department of Fisheries, Forestry and Agriculture
Witless Bay Line Environs Development Control Regulations Access to Quarry	Department of Digital Government and Service NL
Access Approval	Department of Transportation and Infrastructure

7.0 Schedule

This project will commence as soon as approval on the Quarry Permit and all other permits are received, with a tentative start date of April 1st, 2024, and full operation starting summer of 2024. This quarry will be in operation annually creating suitable aggregate until it is depleted of all usable resources. The expected lifespan for this quarry is approximately 25 years.

Submission of Application – March 2024

Approval of Quarry – March 2024

Construction Begins – April 1st, 2024

Quarry becomes Operational – April 1st, 2024

8.0 Conclusion

Farrells Excavating Limited strives to minimize the environmental impact that the quarry will have on the area while yielding the most usable product and ensuring the sustainability of the quarry area. All risk of contamination will be monitored closely and in case of spillage emergency kits will be administered immediately to prevent any further damage from occurring. Any concerns or recommendations from

department members will be taken into effect as well. This project will be fully funded by Farrell's Excavating Limited and cost approximately \$500,000 to become operational.

APPENDIX A – Site Location Detail



Figure 8: Site Plan for New Quarry and Access Road



Figure 9: Proposed Location Overview

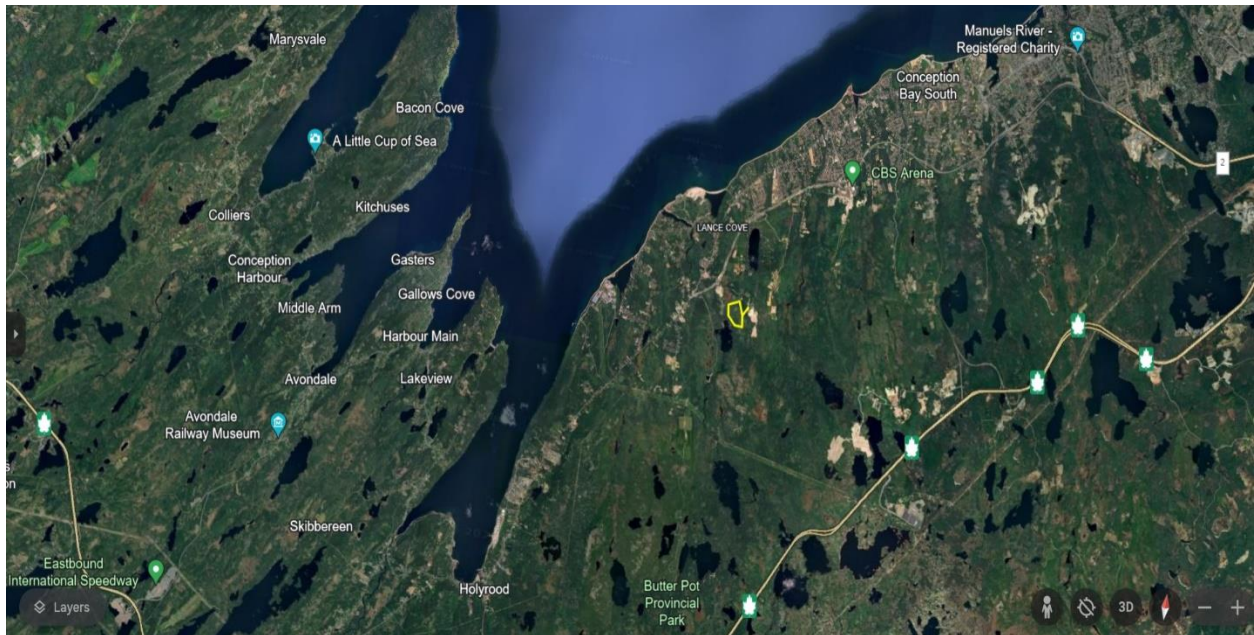


Figure 10: Communities Surrounding Proposed Quarry

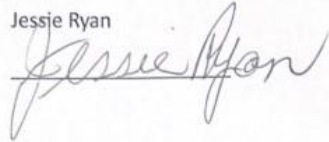
APPENDIX B – Site Access Approval

To whom it may concern,

I, Jessie Ryan, give permission to William Farrell and Company to indefinitely use "Ryans Road" for access to their Quarry.

Thank You,

Jessie Ryan

A handwritten signature in cursive script that reads "Jessie Ryan". The signature is written in dark ink and is positioned below the printed name "Jessie Ryan".

Permission Letter for Ryan's Road Access Granted March 1, 2024