# CRIMSON RIDGE COTTAGE DEVELOPMENT Dildo Pond, Newfoundland and Labrador

**Environmental Assessment Registration** 

Pursuant to the

Newfoundland and Labrador Environmental Protection Act

Submitted by:

Primac Development Inc. PO Box 203 New Harbour, Newfoundland and Labrador Canada A0B 2P0

August 2017

Figure 3.5

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#### 1.0 INTRODUCTION

Name of Undertaking:Crimson Ridge Cottage DevelopmentProponent:Primac Development Inc.Contact Information:Rodney Reid<br/>4 Milers Road, P.O. Box 203<br/>New Harbour, NL A0B 2P0<br/>Tel. (709) 582-3337, Cell (709) 730-8678<br/>Email. rpreid.primacdev@outlook.com

#### 1.1 Nature and Purpose of the Undertaking

The undertaking consists of the development of cottage lots and an associated access road and power line along the northwestern shoreline of Dildo Pond near the communities of Blaketown and South Dildo in Eastern Newfoundland (Figure 1.1). The development is located approximately one kilometer east of the existing highway (Route 80) in this area.

The Proponent is the owner of this property and intends to build a cottage at a chosen location in the Project Area, as well as offering a select number of parcels for sale. A total of 15 lots are planned for the Project, of which six lots are currently owned by family and friends of the Proponent, and nine will be sold for future development.

#### 1.2 Environmental Assessment Process and Requirements

The Newfoundland and Labrador *Environmental Protection Act* (NL EPA, Part 10) requires anyone who plans a project that could have a significant effect on the natural, social or economic environment (an "Undertaking") to present it for examination through the provincial EA process.

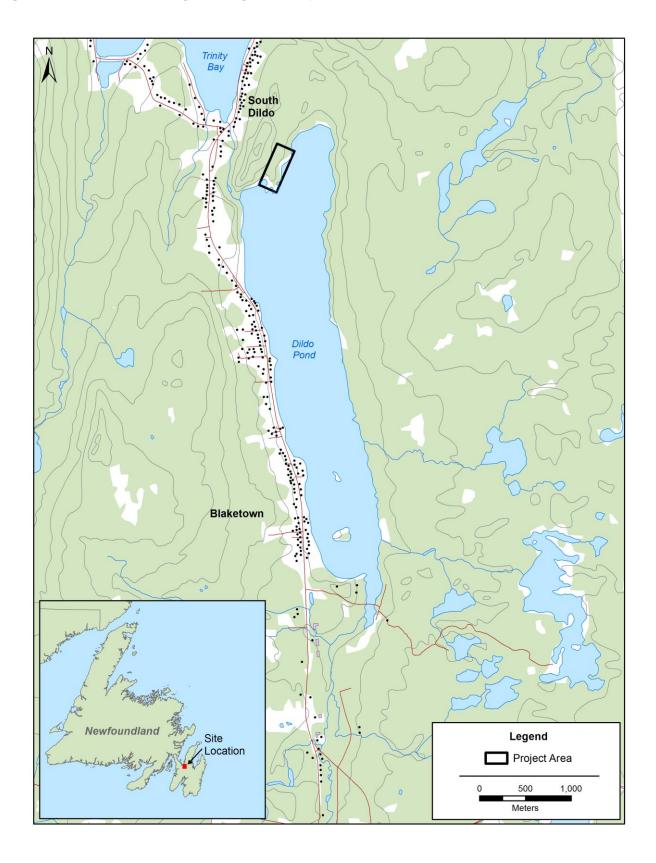
The associated *Environmental Assessment Regulations* (Part 3) list those projects that require EA registration and review. These include, for example:

36(1)(a) Developing or servicing land for subsequent sale, transfer or lease where the total area of the land being developed or serviced will be more than 10 hectares, and

35(1)(b) Construction of roads or the relocation or realignment of existing roads where a portion of the road will be more than 500 metres from an existing right of way.

Although, as described in this EA Registration, the cottage lot development will be less than the 10 hectare size threshold referenced above, the associated, ancillary development and operation of the access road to the site has resulted in the Project being subject to EA review and approval under the provincial EA process. This was communicated and confirmed by the Newfoundland and Labrador EA Division in correspondence to the Proponent dated July 6, 2017.

Following public and governmental review of this EA Registration, the Minister of Municipal Affairs and Environment will determine whether the Project may progress, subject to any associated terms and conditions and other applicable legislation, or whether further assessment is required.



# Figure 1.1 Crimson Ridge Cottage Development: General Location

# 2.0 DESCRIPTION OF THE UNDERTAKING

The following sections provide an overview description of the Project, including its location, main components, and the various activities associated with its construction and operations phases.

#### 2.1 Geographic Location

The Project is located on a portion of a larger, private property (approximately 24.28 hectares, or 60 acres in size) that is owned by the Proponent near the communities of Blaketown and South Dildo, Trinity Bay (Figures 2.1 and 2.2). The property is accessed via a highway entrance situated along Route 80, with the associated access road system for the site being contained within the property boundaries of the Proponent.

The planned cottage lots are bordered by the northwestern shoreline of Dildo Pond, along (but excluding) a 10 metre wide land reserve that is currently in place along that shoreline. The Project Area itself is approximately 4.45 hectares (11 acres) in size and is planned to contain 15 cottage lots, as described further below.

# 2.2 **Project Components**

The Project includes an access road and electricity distribution line to the site and the associated development of 15 cottage lots in the location.

#### 2.2.1 Access Road and Power Line

The cottage lots will be accessed via an approximately 1.3 km long Class A Tertiary Road (Lakeside Drive). The gravel surface access road has a right of way width of approximately 15 metres on average.

The Proponent's experience as an Operations Forester / Supervisor in the areas of road construction has resulted in a chosen road location that has minimized steep elevation and grade deviation and which optimizes natural drainage. There are no watercourse crossings (bridges or culverts) associated with the access road, but six culverts (each being 18 inches in diameter, and approximately 30 feet long) are required at select locations along the road to allow for cross drainage runoff.

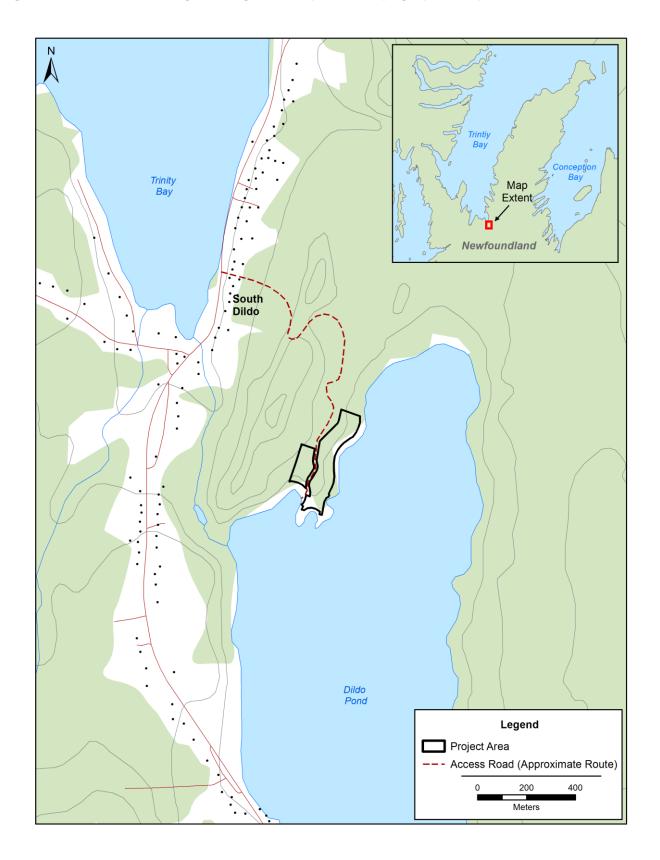
The cottage development also includes a single phase electricity distribution wood pole line along the length of the road from the existing Newfoundland Power infrastructure on Route 80, which will service the cottage lots themselves.

# 2.2.2 Cottage Lots

The Project includes the development of 15 cottage lots at this location (Figure 2.3), of which six are currently owned by family and friends of the Proponent (Lots 7, 8, 9, 10, 12, 13) and the remaining nine will be sold for development by individual property owners.

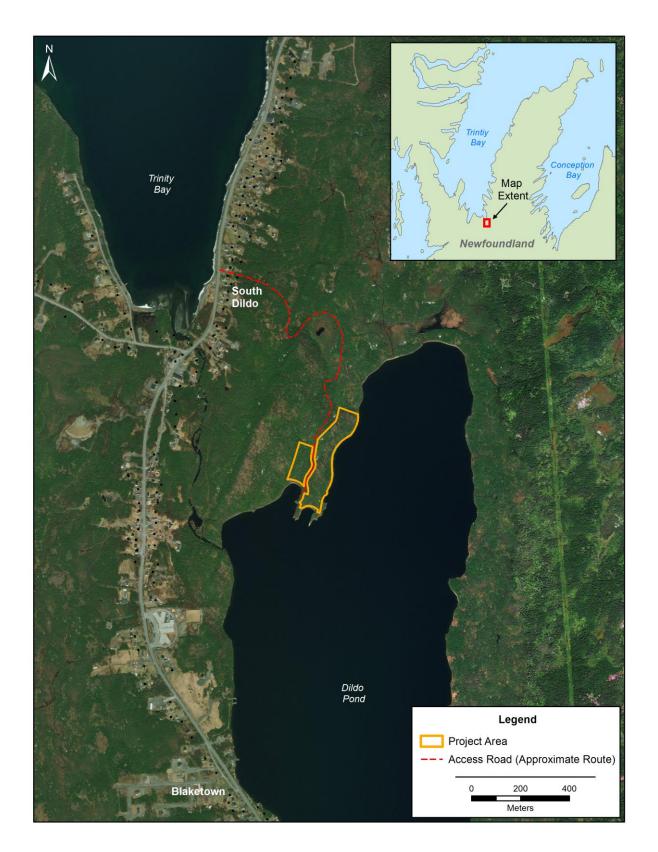
The individual lots range in size from approximately 0.26 to 0.36 hectares (0.65 to 0.90 acres). (Figure 2.3). All of the lots will be accessible via the access road described in the previous section.

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# Figure 2.1 Crimson Ridge Cottage Development: Topographic Map View

# Figure 2.2 Crimson Ridge Cottage Development: Air Photo View



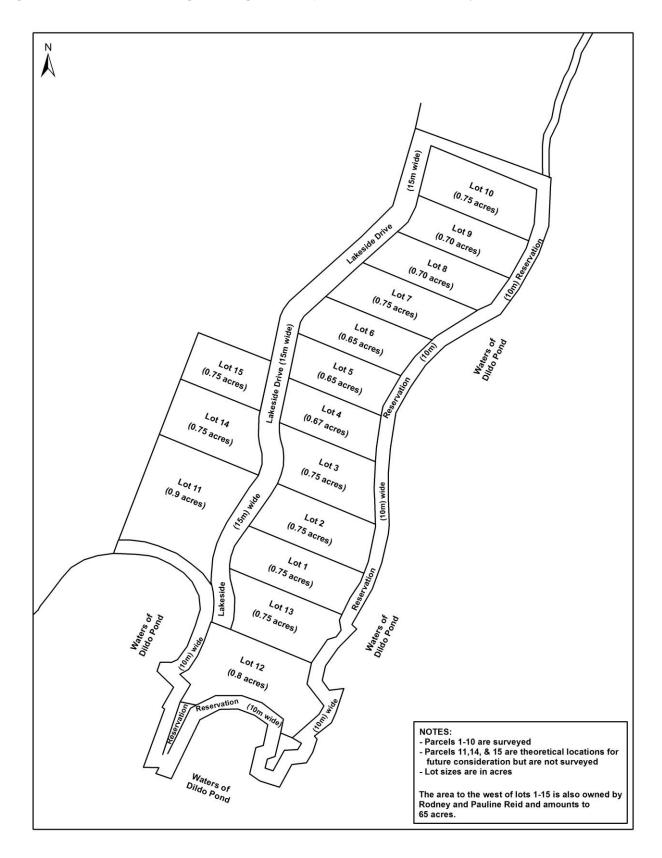


Figure 2.3 Crimson Ridge Cottage Development: General Lot Layout

# 2.3 Construction

Standard and relatively routine construction methods are used for access road construction and site preparation work such as that associated with this Project. All Project-related planning and in-field work will continue to be carried out in accordance with applicable environmental regulations and standards.

Primac's approach to access road and lot development are based on typical and effective construction techniques, including the following general methods and principles:

- During initial site preparations, trees are removed manually using brush saws and chain saws. Limits of clearing are clearly identified and adhered to.
- On-site vegetation (potential saw logs and firewood) are salvaged for future use.
- Once cleared of vegetation, work areas are grubbed and stripped, with any topsoil stockpiled appropriately for future use.
- Road surfaces and sub-grades are developed using local material that is rolled and compacted during the various phases of construction so as to minimize future maintenance costs.
- Although no stream crossing are associated with the access road, all drainage patterns are treated with the same care and attention as would a regular water crossing with respect to installation method and final erosion control mitigation. Once installed, drainage culverts are inspected regularly to ensure that they are functioning properly.
- Fill and surfacing materials for access road construction and lot development are obtained either from directly within the developed footprint of the Project site itself, or from any nearby existing quarries in the general region.
- Following clearing and site preparation of the roadbed and lot development areas, the locallysourced materials are transported to the worksite and distributed, spread and compacted using standard construction equipment and methods.
- All overburden and exposed areas are brought to a stable repose and are seeded where possible to provide for erosion protection.

The main equipment used for access road construction and cottage lot development include tracked excavators / dozers and dump trucks, with construction taking place over a single construction season.

# 2.4 Operation

The Proponent is in the initial stages of home design for his own purposes and intends to commence with construction of that cottage on one of the lots as soon as possible, based on the availability of local contractors.

Further cottage lots will be sold and developed on an individual basis, with the particular approach and schedule being determined by the lot owner. Any associated individual lot clearing / excavation and development (including the installation of individual water and sewer systems) will be at the discretion of the lot owners. Similarly, all utility hook-up costs from the main power line to the respective homes will be an arrangement between the home owners and Newfoundland Power, and will be at the expense of the home owner as specified in the individual Purchase and Sale Agreements.

Year-round access will being provided to the cottage lots via the access road described previously, pursuant to a road maintenance program administered by the Proponent. The maintenance program will continue in perpetuity amongst all property owners and will be sustained via the collection of road maintenance fees each year as well as revenue from the future sale of the lots themselves. In addition, binding agreements (covenants) will be in place at the time of sale that stipulate the expectations of the buyer with respect to the general up-keep and housekeeping of their property in order to maintain the aesthetic value for all home owners. These covenants reflect the Proponent's core values and vision for the property with respect to cleanliness, environmental protection and overall pride in the area.

Going forward, lot owners will therefore be responsible for their own lot clearing, excavation and cottage development and maintenance activities and costs. Applicable permits will be acquired at each stage of development, which will include but may not be limited to burning permits if required, water and sewer design and approval and electrical permits (Appendix A).

# 2.5 Labor Force and Project Cost

Project-related construction activities require limited labour, supplied by a local contractor. This includes 1-2 excavator operators (NOC 7521) and one truck driver (NOC 7511) on site in order to assist with the various stages of completion.

As noted above, future lot development work and ground excavating will be undertaken by each of the lot owners on an individual basis. Further professional services that may be required on an individual basis include carpenters, roofers, electricians, plumbers, cement finishers and other trades as applicable. Additional services for well and septic design and installation would also likely be required.

The anticipated total cost of the Project is \$250,000.00.

#### 3.0 ENVIRONMENTAL SETTING, POTENTIAL INTERACTIONS AND MITIGATION

The following provides an overview of the existing environmental setting for the Project, including a description of relevant components of the biophysical and socioeconomic environments. This is followed by an overview analysis of the Project's potential environmental interactions and the identification and description of mitigation measures which have been applied and will be put in place to avoid or reduce any such effects.

#### 3.1 Natural Environment

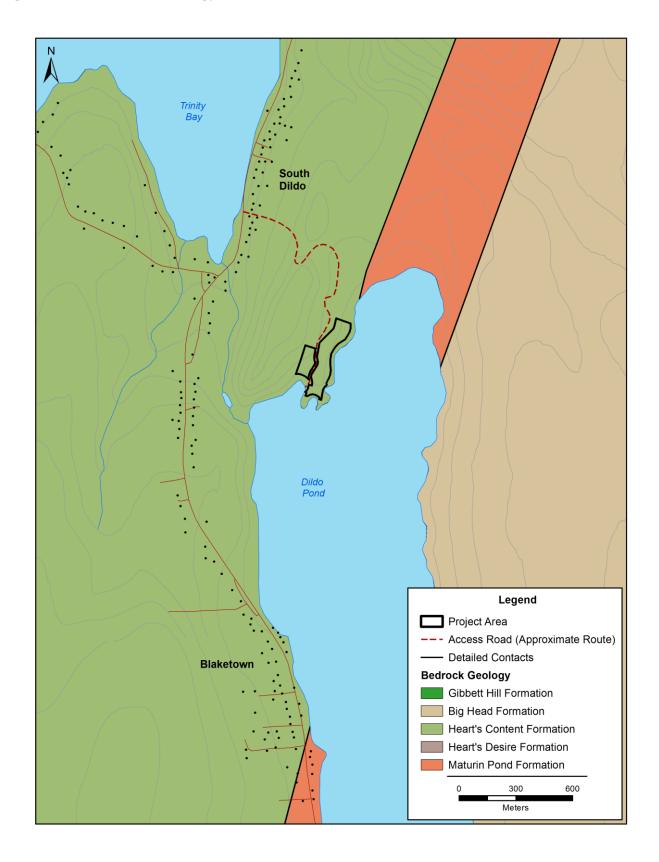
The elevation of the Project Area is between 30 and 50 m above sea level (asl). Data from Environment Canada's weather station in nearby Holyrood (approximately 40 km east of the site) indicates a daily mean temperature of 6.3°C, ranging from an average high of 17°C in August to an average low of - 3.6°C in February. Annual precipitation averages 1,189 mm, of which 85 percent is rainfall and 15 percent is snowfall. October and January typically have the most precipitation and August has the least (Environment Canada 2017).

In terms of its bedrock geology, the Project Area is located within the Avalon tectonic zone, where originally flat lying sedimentary sequences have been compressed in an east – west configuration. South Dildo is located within a complex syncline – anticline system with moderately to steeply dipping bedding planes. The site is underlain by sedimentary rocks of the Musgravetown Group, and is directly underlain by grey-black shales of the Heart's Content Formation and is adjacent to red sandstone, mudstone and minor conglomerate of the Maturin Ponds Formation (King 1988). Tuffaceous siltstone and arkose of the Big Head Formation are located east of the Maturin Ponds Formation. The Project Area is located near the contact of the Heart's Content and Maturin Ponds Formations (Figure 3.1, adapted from NL DNR 2017).

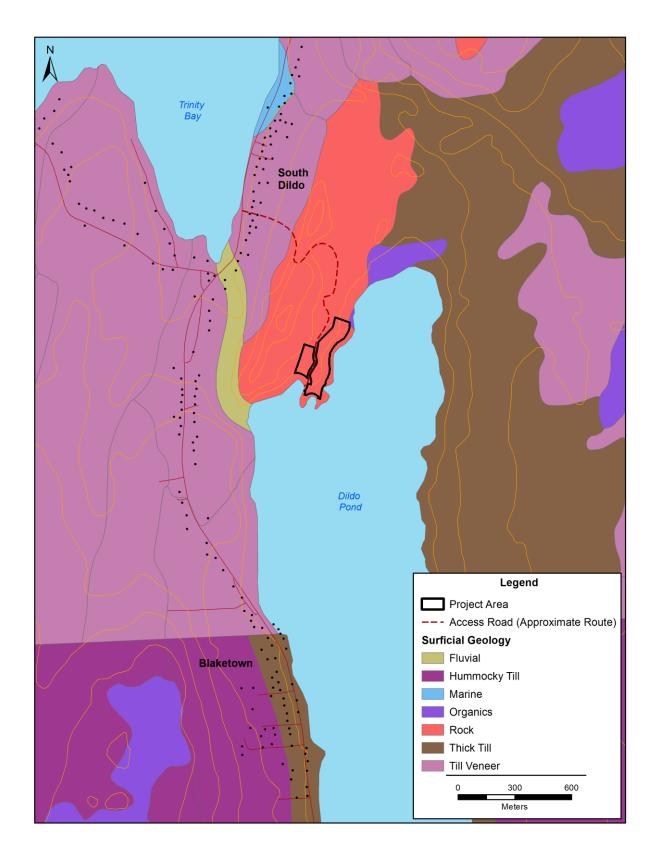
The surficial geology at the site consists of ridges of bedrock concealed by bog as well as areas of glacial till veneer generally less than 1.5 m thick (Batterson et al 2003). The bog is described as accumulations of peat, peat moss and other organic matter in poorly drained areas. Given the thin layer of till and ridges of exposed bedrock, the surficial geology of the area surrounding the site is illustrated as rock on the Department of Natural Resources' Online Geoscience Atlas (Figure 3.2, adapted from NL DNR 2017).

The Project Area is located within the extensive *Maritimes Barrens Ecoregion* (Meades 1990; NL DFLR 2017), which extends from the east coast of Newfoundland to the west coast through the south central portion of the Island. This ecoregion has the coldest summers on the Island with frequent fog and strong winds. Winters are relatively mild with intermittent snow cover particularly near the coastline. Annual precipitation exceeds 1,250 mm. The glacial tills in the area are generally shallow rolling ground moraine with sandy loam to loam texture. The landscape pattern consists of usually stunted, almost pure stands of balsam fir, broken by extensive open heathland. Good forest growth is localized on long slopes of a few protected valleys. Within the larger *Maritimes Barrens Ecoregion*, the *Southeastern Barrens Subregion* encompasses the Project Area itself. In this subregion the landscape is dominated by heathlands and the forest only occurs in small acreages which escaped fire. The topography is generally undulating with shallow heavily compacted till and numerous large erratics. The clintonia-balsam fir type is most common where forest is still present. Good forest growth only occurs in a few large protected valleys where the dryopteris-balsam fir type dominates the slopes. Good specimens of yellow birch are also found (Meades 1990; NL DFLR 2017).

# Figure 3.1 Bedrock Geology



# Figure 3.2 Surficial Geology



The Project Area itself contains vegetation cover that is typical of the general area, comprised of a rolling, well drained topography with pockets of spruce, balsam fir and birch that are generally over mature or declining (Figure 3.3). Site investigation work has also indicated a thick topsoil and organic layer underneath the forest canopy. There are some marshy areas on the overall property that are within the general vicinity of the Project Area but do not encroach upon the boundaries of the cottage lots themselves. No plant or animal species that are listed under the Newfoundland and Labrador *Endangered Species Act (NL ESA)* or the Canadian *Species at Risk Act (SARA)* are known or considered likely to occur within the Project Area.

There are no waterbodies or watercourses located along or within the immediate vicinity of the access road or cottage lots, with the exception of Dildo Pond which has an associated exclusion buffer zone (10 m wide reservation), as described previously. A summary of the Project Area's proximity to waterbodies and watercourses in the larger surrounding area is summarized below and in Figure 3.4:

- Located directly adjacent to Dildo Pond (see map inset watershed area of 53 km<sup>2</sup>).
- Approximately 500 m east of an unnamed stream.
- Approximately 800 m south of Trinity Bay.
- Approximately 1.5 km west of the Broad Cove Pond protected water supply catchment area (Figure 3.5).

# 3.2 Human Environment

The Project is located in the southeastern portion of the Island of Newfoundland, less than one kilometre inland from the coastline of Trinity Bay and just south of the community of South Dildo and north of Blaketown.

The Project Area and surrounding communities are located within Newfoundland and Labrador *Local Area 16 (Whitbourne Area)*, which had a total population of 2.405 residents in 2016 (Statistics Canada 2017), including the nearby communities of Blaketown (510 persons), South Dildo (156 persons) and other residential areas.

The existing highway (Route 80) runs to the west of the Project Area, and the access road associated with this Project extends off that highway. The Project Area is located entirely on private land, outside of any municipal boundaries or planning areas, community infill limits or local service district bounds.

Figure 3.5 provides an overview of the Project Area in the context of other, regional land and resource uses in the area. The Project is located nearly 500 m from any nearby residences or other community infrastructure.

# Figure 3.3 Typical Site Vegetation and Dildo Pond Shoreline

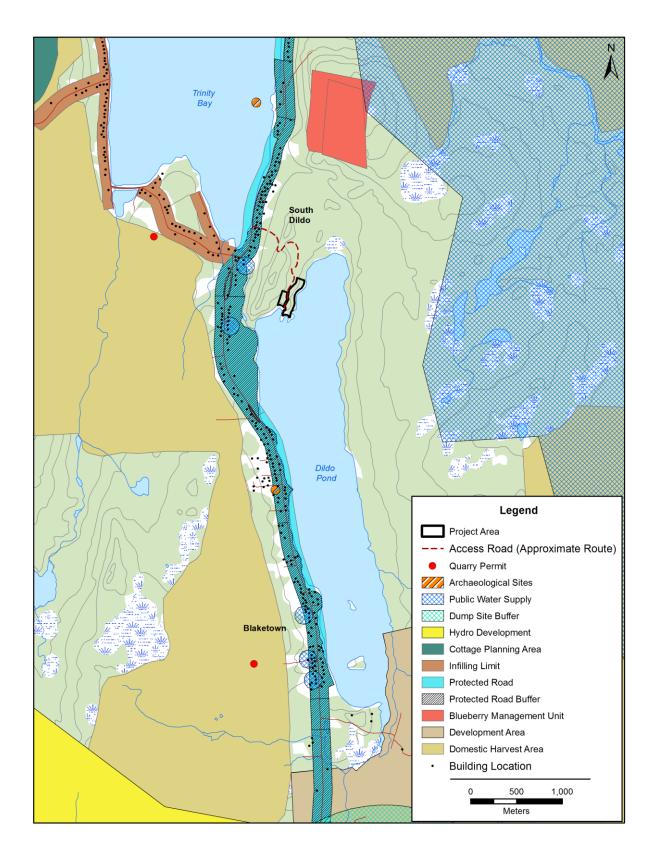


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# N Dildo Pond Legend Project Area Access Road (Approximate Route) -Watershed Area 75 150 Meters

# Figure 3.4Overview of Adjacent Waterbodies and Watercourses

# Figure 3.5 Adjacent Communities and Land Uses



# 3.3 Potential Environmental Interactions and Mitigation

The following sections provide a focussed environmental analysis for the Project, including each of its associated components and activities. The analysis focuses upon, and is organized according to, the following themes:

- 1) Atmospheric Environment
- 2) Terrestrial Environment
- 3) Freshwater Environment, and
- 4) Socioeconomic Environment

# 3.3.1 Atmospheric Environment

The environmental analysis for the atmospheric environment includes consideration of any likely implications of the Project on air quality and noise levels within and around the Project Area.

The main interactions between Project construction and the atmospheric environment relate to the use of equipment, and the associated noise, dust and engine emissions associated with these activities. This include various activities associated with land clearing and site preparation, the movement and placement of equipment and materials, and other activities, resulting in some minor, temporary and localized air emissions due to Project-related dust and emissions from vehicles and equipment.

As noted previously, Project construction is characterized by fairly standard and routine activities and practices, occurring within a localized area over a short period of time, and with minimal heavy equipment required. Project-related vehicles and equipment have been and will continue to be maintained in good repair and inspected regularly, and any associated air emissions from equipment and vehicles will conform to applicable regulations and guidelines. Fugitive dust from construction activities are controlled as necessary using dust control agents, particularly water. As a result of the above, as well as with consideration of the relatively localized and short-term (temporary) nature of the construction, there are no anticipated adverse implications for existing air quality or noise levels in the area.

During long-term Project operations, the nature and degree of on-site activity will be considerably less than that during the construction phase, and will be characterized by residential activities that are not particularly noisy, nor characterized by significant air emissions or other environmental discharges.

A summary of environmental effects and identified mitigation measures for the Project on the atmospheric environment is provided in the Table below.

Environmental	Projec	ct Phase / Poter	ntial Interaction	Key Considerations and
Component	Construction	Operations	Issues / Interactions	Environmental Mitigation
Air Quality	•		<ul> <li>Construction works</li> <li>Equipment use (vehicles, fuel consumption)</li> </ul>	<ul> <li>Localized and short- term construction activity.</li> </ul>

 Table 3.1
 Environmental Effects Assessment Summary: Atmospheric Environment

Environmental	Projec	Key Considerations and		
Component	Construction	Operations	Issues / Interactions	<b>Environmental Mitigation</b>
Noise Levels	•		<ul> <li>Possible accidental event (fire, others)</li> </ul>	<ul> <li>Standard construction and environmental protection practices</li> <li>Adherence to legislation and regulations.</li> <li>Regular inspection and maintenance of equipment.</li> <li>Residential activity during long-term operations.</li> </ul>

#### 3.3.2 Terrestrial Environment

The Terrestrial Environment is comprised of relevant components of the "on-land" biophysical environment which may interact with the Project, including vegetation, soils and wildlife.

Project construction for developments such as this one involves vegetation clearing, site preparation and excavation activities. The Project site itself is characterized by a relatively small footprint and is overlain primarily by barren (rocky) ground interspersed with pockets of mature forest (see Figure 3.3). There are no listed (protected) plant or wildlife species known or likely to occur within or near the Project Area.

Vegetation clearing and other ground disturbance activities are confined to only those areas where it is necessary, with limits of clearing marked in advance and only designated areas being cleared. Any merchantable timber will be salvaged for future use. Waste materials generated through Project related activities will be removed from the area and disposed of at an approved site.

Adverse interactions with wildlife are not likely to occur. Although any wildlife that may be present in the immediate area that may be disturbed by Project-related noise, human presence or other interactions may avoid the immediate vicinity of such works, any such avoidance and the associated ground (habitat) disturbance associated with the Project is not expected to affect the overall presence or health of any wildlife population in the area, and there is similar habitat available throughout the larger, surrounding area.

During the operations (cottage construction and residential activity) phase of the Project there will be little or no additional surficial soil or vegetation disturbance, and therefore, little or no potential for further effects to these aspects of the terrestrial environment.

A summary of potential environmental effects and identified mitigation measures for the Project on the terrestrial environment is provided in the Table below.

Environmental	Project Phase / Potenti		ial Interaction	Key Considerations	
Component	Construction	Operations	Issues / Interactions	and Environmental Mitigation	
Vegetation	•		Ground     disturbance /     clearing	<ul> <li>Localized and small Project "footprint", clearly delineated</li> <li>Waste management facilities</li> </ul>	
Soils	•		Possible fuel or chemical spills	<ul> <li>and procedures</li> <li>Localized and short-term construction activity.</li> </ul>	
Wildlife	•		<ul> <li>Noise, human presence, ground clearing and other disturbances</li> <li>Possible avoidance of Project Area</li> </ul>	<ul> <li>Standard construction and environmental protection practices</li> <li>Adherence to legislation and regulations.</li> <li>Residential activity during long-term operations.</li> </ul>	
Terrestrial Species at Risk				None known or likely to occur in or near Project Area	

# 3.3.3 Freshwater Environment

The freshwater environment includes surface and groundwater (quantity and quality) and any fish and fish habitat which may interact with the Project.

There are no waterbodies or watercourses located within the immediate vicinity of the access road or cottage lots, with the exception of Dildo Pond, which has an associated exclusion buffer zone (10 m wide reservation) that is being adhered to as described previously.

During future development activities, site drainage will be managed as required to prevent water containing sediment and/or other substances from entering this waterbody. Work will also be performed in a manner ensuring that no deleterious substances such as sediment, fuel and oil enter the pond.

A level one ground water assessment has been undertaken on the property which has concluded that the area will support a flow rate that will sufficiently support 1,400 gallon per day recovery rate that will adequately support each lot within the development area.

During planned Project operational activities there will be no additional, direct interactions with surface water resources, including any adjacent waterbodies or watercourses. The drainage culverts installed along the access road will continue to be used and inspected / repaired as required, and site drainage will be controlled as necessary.

A summary of potential environmental interactions and identified mitigation measures for the Project on the freshwater environment is provided in the Table below.

Environmental	Project Phase / Potential Interaction			Key Considerations and	
Component	Construction	Operations	Environmental Mitigation		
Surface Water (Quantity and Quality)	•		<ul> <li>Issues / Interactions</li> <li>Ground clearing and associated sedimentation</li> <li>Potential accidental spills</li> </ul>	<ul> <li>Localized and short-term construction activity.</li> <li>Standard construction and environmental protection practices.</li> <li>Adherence to legislation and regulations.</li> <li>Residential activity during long-term operations.</li> </ul>	
Groundwater (Quantity and Quality)		•	Future development of wells	<ul> <li>Compliance with legislation / regulations and permits</li> <li>Level one groundwater assessment completed.</li> </ul>	
Fish and Fish Habitat	•		<ul> <li>Ground clearing and associated sedimentation</li> <li>Potential accidental spills</li> </ul>	<ul> <li>Localized and short-term construction activity.</li> <li>Standard construction and environmental protection practices.</li> <li>Adherence to legislation and regulations.</li> <li>Residential activity during long-term operations.</li> </ul>	
Freshwater Species at Risk				None known or likely to occur in or near Project Area	

Table 3.3 Environmental Energy Assessment Summary. Freshwater Environment	Table 3.3	Environmental Effects Assessment Summary	: Freshwater Environmen
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# 3.3.4 Socioeconomic Environment

The socioeconomic environment includes relevant components of the human and cultural environments, including historic resources, land and resource use activities (commercial, municipal, recreational), human health and well-being, community services and infrastructure, and economy.

Historic resources include sites and objects of historic and archaeological, cultural, spiritual and paleontological importance, which may be protected under the Newfoundland and Labrador *Historic Resources Act* (1985) administered by the Provincial Archaeology Office (PAO). Ownership of all archaeological objects is vested in the Crown. Construction activities and associated ground disturbance have the potential to disturb or destroy archaeological sites and other historic resources.

There are no known historic resources within or near the Project Area. The Project "footprint" itself is relatively small, and it is unlikely that it will result in the disturbance or destruction of historic resources. Standard precautionary and reporting procedures will, however, be implemented. Should an accidental discovery of historic resources occur, all work will cease in the immediate area of the discovery until authorization is given for the resumption of the work. Any archaeological materials encountered will be reported to the PAO, including information on the nature of the material discovered and the location and date of the find. During the operations phase of the Project there will be little or no new surficial ground

disturbance, and therefore, little or no potential for effects to historic resources. The precautionary and reporting procedures implemented during construction will, however, continue to be in place throughout the life of the Project.

Project construction and eventual operations are characterized by fairly standard and routine activities and practices, occurring within a small and localized area over a relatively short period. The Project site is located away from local communities, and is not expected to interact with these communities or their residents either directly (it does not overlap with any municipal boundaries) or indirectly (Project activities will not likely be seen or heard from nearby residences or communities).

The Project Area is located on private property, and no specific land and resources uses in the immediate Project Area were identified through the existing and available information.

A summary of potential environmental effects and identified mitigation measures for the Project on the socioeconomic environment is provided in the Table below.

Environmental			Key Considerations and	
Component	Construction	Operations	Issues / Interactions	Environmental Mitigation
Historic Resources	•	•	<ul> <li>Ground disturbance (clearing, excavation)</li> </ul>	<ul> <li>Localized construction and operations activity</li> <li>No known (and low potential for) historic resources in the area</li> <li>Standard precautionary and reporting procedures</li> </ul>
Land and Resource Use			<ul> <li>Potential direct interaction with current uses and other disturbances (noise, dust, visibility, etc)</li> </ul>	<ul> <li>Private property</li> <li>Localized and short-term construction</li> <li>Residential activities during operation</li> <li>Distance from local communities, no likely overlap or interaction</li> </ul>
Human Health and Well-Being			<ul> <li>Potential implications of Project-related emissions and other disturbances for human health and well-being in local communities or elsewhere</li> </ul>	<ul> <li>Distance from, and low potential for interaction with, communities and residents</li> <li>Standard construction and environmental protection practices, adherence to legislation and regulations</li> </ul>
Community Services and Infrastructure			<ul> <li>Potential Project use of, and demands for, local services and infrastructure</li> </ul>	<ul> <li>Localized and short-term construction activity</li> <li>Residential activities during operation</li> <li>Timing and scale of Project activities</li> <li>Distance from and minimal interaction with communities</li> </ul>

 Table 3.4
 Environmental Effects Assessment Summary: Socioeconomic Environment

Environmental	Project Phase / Potential Interaction			Key Considerations and	
Component	Construction	Operations	Issues / Interactions	Environmental Mitigation	
Economy	•	•	<ul> <li>Employment and business opportunities</li> </ul>	<ul> <li>Some small scale constriction related business (contactor) opportunities</li> <li>Eventual long term residential development in the area will help enhance local economy.</li> </ul>	

#### 3.4 Effects of the Environment on the Project

The Project has been planned and designed with due consideration of the local environmental conditions in and around the Project Area. Geological characteristics, topographic features, waterbodies, existing infrastructure and other environmental factors have, to varying degrees, influenced the siting and design of the Project and its associated components and activities. Weather conditions will also likely influence the timing of some future activities. No additional or specific mitigation measures are required or proposed in relation to the possible effects of the environment on the Project.

#### 3.5 Environmental Monitoring and Follow-up

Any potential environmental issues which may be associated with the Project have been and will be addressed and mitigated through the use of good design, construction and operational practices and procedures, as described throughout this document. No other environmental monitoring or follow-up is considered necessary in relation to the Project.

# 4.0 PROJECT-RELATED DOCUMENTS AND APPROVALS

Apart from this EA Registration, no other EA-related documents have been produced by the Proponent in relation to this Project.

In addition to approval under the provincial EA process, the Project may require a number of environmental permits and other approvals from various provincial, federal and/or municipal authorities in relation to its construction and/or operations activities. These are summarized in Appendix A.

August 10, 2017

Original signed by,

Date

**Rodney Reid** 

# 5.0 REFERENCES

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APPENDIX A

List of Potentially Applicable Permits and Authorizations

# List of Potentially Applicable Permits and Authorizations Project Construction and/or Future Lot Development by Individual Residential Owners

Approval Potentially Required	Legislation / Regulation	Project Component / Activity Requiring Approval or Compliance	Department or Agency	Requirements
Government of Ne	wfoundland and	Labrador		
Commercial Cutting Permit Operating Permit	Forestry Act and Cutting of Timber Regulations	Clearing land areas	Department of Fisheries and Land Resources	A permit is required for the commercial cutting of timber.
Permit to Burn	Forestry Act and Forest Fire Regulations	Any burning required during Project clearing	Department of Fisheries and Land Resources	A permit is required to light fires outdoors between April and December. Permits are not issued during forest fire season.
Access to Highway Permit	Urban and Rural Planning Act, Protected Road Zoning Regulations	Construction of access road	Department of Transportation and Works and/or Service NL	The construction of an access to a highway that is classified as a Protected Road requires approval
Certificate of Approval for any Alteration to a Body of Water	Water Resources Act	Any activities in proximity to or which may alter a water body	Water Resources Management Division, Department of Municipal Affairs and Environment	Approval is required before undertaking construction activities within 15 metres of any water body. This includes stream crossings, drainage works and any other work such as landscaping, clearing or cutting of any natural vegetation within 15 metres of a body of water.
Compliance Standard	Water Resources Act, Environmental Control Water and Sewage Regulation	Any waters discharged from the Project site	Department of Municipal Affairs and Environment	A person discharging materials into a body of water must comply with the standards, conditions and provisions prescribed in the regulations for the constituents, contents or description of the discharged materials.
Policy Directives	Water Resources Act	Project activities	Water Resources Management Division, Department of	The Department has a number of potentially applicable policy directives in place for specific types

Approval Potentially Required	Legislation / Regulation	Project Component / Activity Requiring Approval or Compliance	Department or Agency	Requirements
			Municipal Affairs and Environment	of work and/or work in sensitive areas.
Water Use Authorization	Water Resources Act	Water withdrawal for use during construction and operation activities (if required)	Water Resources Management Division, Department of Municipal Affairs and Environment	Water use authorization is required for all beneficial uses of water.
Application for Water Well Drilling License	Water Resources Act	Drilling activity for a water well (if required)	Water Resources Management Division, Department of Municipal Affairs and Environment	A license is required for water well drilling in Newfoundland and Labrador.
Septic or Water System Approvals: Less Than 4546 L Per Day and Well Approval	Health and Community Services Act, Sanitation Regulations Water Resources Act, Environmental Control Water and Sewage Regulations, 2003 Well Drilling Regulations, 2003	Septic and water system development	Service NL	A building lot in an unserviced area must be approved for the installation of a sewage disposal system and well. Plot plans and specifications for the installation of the disposal system and well are to be prepared by an Approved Designer.
Compliance Standard	Environmental Protection Act, Air Pollution Control Regulations	On-site equipment	Pollution Prevention Division, Department of Municipal Affairs and Environment	The Regulations outline specific ambient air quality standards and emission standards
Quarry Permit	Quarry Materials Act and Regulations	Extracting borrow material (if required)	Mineral Lands Division, Department of Natural Resources	A permit is required to dig for, excavate, remove and dispose of any Crown quarry material.
Compliance Standard	Health and Community Services Act, Sanitation Regulations	Sewage and waste disposal	Department of Health and Community Services	Outlines standards for sewage and waste disposal.

Approval Potentially Required	Legislation / Regulation	Project Component / Activity Requiring Approval or Compliance	Department or Agency	Requirements
Compliance Standard	Occupational Health and Safety Act and Regulations	Project-related occupations	Service NL	Outlines minimum requirements for workplace health and safety.
Government of Ca	inada			
Compliance Standard	Fisheries Act, Section 36(3), Deleterious Substances	Any run-off from the Project site being discharged to receiving waters	Environment and Climate Change Canada	Environment Canada is responsible for Section 36(3) of the <i>Fisheries Act</i> . Discharge must not be deleterious and must be acutely non-lethal.
Compliance Standard	Migratory Birds Convention Act and Regulations	Any activities which could result in the mortality of migratory birds and endangered species and any species under federal authority	Canadian Wildlife Service, Environment and Climate Change Canada	Prohibits disturbing, destroying or taking a nest, egg, nest shelter, eider duck shelter or duck box of a migratory bird, and possessing a live migratory bird, carcass, skin, nest or egg.
Compliance standards; permits may be required.	National Fire Code	On-site structures	Service NL	Approval is required for fire prevention systems in all approved buildings.
Compliance standards; permits may be required.	National Building Code	On-site structures	Service NL	Approval is required for all building plans.
Municipalities		[		-
Approval for Waste Disposal	Urban and Rural Planning Act, 2000, and Relevant Municipal Plan and Development Regulations	Waste disposal	Local Community Council(s)	The use of a community waste disposal site in Newfoundland and Labrador by proponents/contractors to dispose of waste requires municipal approval. Restrictions may be in place as to what items can be disposed of a municipal disposal site.