

Morien Resources Corporation

Black Point Quarry Project Description Executive Summary



Project #60314716

Prepared by
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Executive Summary

Project and Regulatory Environment

Morien Resources Corp. (Morien, the Proponent) proposes the development, operation, decommissioning and abandonment of a granite quarry and marine terminal at Black Point in Guysborough County, Nova Scotia (**Figures ES-1 and ES-2**). The Black Point Quarry Project consists of aggregate production (drilling, blasting, processing and stockpiling) on a 354.5 ha property, along with the construction and operation of a 200 m long marine terminal adjacent to the quarry in Chedabucto Bay. The aggregate will be loaded into bulk carriers up to 70,000 DWT and transported to ports along the US eastern and Gulf coasts and potentially to markets in Canada and the Caribbean.

Designated Project: Black Point Quarry Project
Proponent: Morien Resources Corp. (Morien)

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The Project is expected to require an environmental assessment (EA) pursuant to the federal *Canadian Environmental Assessment Act, 2012*. Two specific project activities listed in the federal *Regulations Designating Physical Activities* are anticipated to necessitate a federal EA:

16(g) the construction, operation decommissioning and abandonment of a new **stone quarry** with a production capacity of 3,500,000 tonnes per year or more;

24(c) the construction, operation decommissioning and abandonment of a new **marine terminal** designed to handle ships larger than 25,000 DWT unless the terminal is located on lands that are routinely and have been historically used a marine terminal or that are designated for such use in a land-use plan that has been the subject of public consultation.

Other federal legislative and regulatory requirements applicable to the Project include the *Fisheries Act*, the *Migratory Birds Convention Act, 1994*, the *Species at Risk Act*, the *Explosives Act*, the *Canada Shipping Act, 2001*, the *Oceans Act* and the *Navigable Waters Protection Act*.

As a quarry larger than 4 ha and an undertaking that may disrupt wetlands in excess of 2 ha, the proposed Project is considered to be a Class 1 Undertaking under Schedule A of the provincial *Environmental Assessment Regulations*, and will require the submission of an Environmental Assessment Registration Document.

The lands to be developed by the Proponent are owned by the Municipality of the District of Guysborough (MODG) and will be leased to the Proponent. The Project site consists of properties assembled through a recently approved land exchange with the Province and through expropriation of private lands. In addition

to the onshore land requirements, provincial Crown land in the marine environment will be required for construction of the deep-water terminal. This area has not been previously used as a marine terminal and has not been so designated by the MODG. The Proponent will work with the MODG (the upland landowner) to make application to the Nova Scotia Department of Natural Resources (NSDNR) to lease a portion of the seabed extending from the ordinary high water mark north approximately 300 m to allow for construction and operation of the deep-water terminal.

The Project is not expected to impact federal lands in other provinces or outside of Canada. The nearest terrestrial federal lands are the Canso Islands National Historic Site of Canada (which include the Grassy Island Forts site), located approximately 10 km due east of Black Point. Although the marine terminal will be constructed within the limits of a Provincial seabed Crown lease, aggregate shipping will occur on “federal lands” as defined in CEAA, 2012 s. 2b. Federal lands in this context refer to that portion of the ocean claimed by Canada.

The Project’s geographic co-ordinates are presented in Table ES-1.

Table ES-1 Proposed Project Boundary Coordinates

| Boundary Location | Easting | Northing |
|------------------------------|------------|-------------|
| Terrestrial Property | | |
| North West Corner | 643573.480 | 5023895.438 |
| South West Corner | 644005.711 | 5022431.120 |
| South East Corner | 645930.498 | 5022389.912 |
| North East Corner | 645955.893 | 5023627.756 |
| Submerged Crown Lease | | |
| North West Corner | 644130.37 | 5024312.49 |
| South West Corner | 644275.16 | 5024050.04 |
| South East Corner | 644900.62 | 5024394.53 |
| North East Corner | 644791.83 | 5024744.29 |

Context and Objectives

Construction aggregates consist primarily of crushed stone, sand and gravel. These resources are critical components for the development and maintenance of modern infrastructure such as roads and buildings. While construction aggregates are relatively abundant, they must be located in accessible areas to be of economic value since they are low priced, high volume commodities and the cost of transporting them to the market can easily exceed the value of the material. Aggregates must also meet strict quality requirements related to the chemical and physical characteristics of the rock.

The primary objective of the Project is to establish a hard rock (granite) quarry to supply construction aggregate to markets on the US eastern and Gulf coasts and potentially to markets in Canada and Caribbean. The anticipated average annual production rate will exceed 1.0 million tonnes with an anticipated peak production rate of up to 7.5 million tonnes per year depending on prevailing market conditions. Estimated rock reserves in the proposed quarry area are upwards of 400+ million tonnes.

Quarry operations are expected to take place over an approximate 50+ year period with the finished quarry occupying approximately 180 ha.

The Project will not require federal financial support and will not use federal lands. The lands to be developed by the Proponent are owned by the Municipality of the District of Guysborough (MODG) and will be leased to the Proponent. In addition to the onshore land requirements, Crown land in the marine environment will be required for construction of the deep-water terminal.

Components and Activities

The Project will be completed in three phases: site preparation, operations and decommissioning. The primary components associated with the Project include:

- An unpaved access road from provincial Route 16 into the quarry;
- The quarry and primary crushing area located within or just outside of the quarry pit;
- Main feed conveyor from the primary crusher to the processing plant;
- The processing (finishing) plant consisting of secondary and tertiary processing and a stockpile laydown area;
- Modular buildings that comprise the administration complex; and,
- A 200 m long marine terminal and load-out facility.

The site preparation and construction phases of the Project will begin with the clearing of vegetation and overburden from the proposed quarry. An 800 m unpaved road will be constructed from Route 16 to the quarry property boundary then extended approximately 2.5 km into the quarry property to access the processing area and marine terminal. The marine terminal will be constructed adjacent to the processing area and will be equipped with an anchored radial arm ship loader. Electrical needs will be satisfied through a tie-in to the existing Nova Scotia Power Inc. electrical transmission line that parallels the southern boundary of the Project site.

Quarrying will be undertaken using drilling and blasting. Blasted rock will be loaded by front-end loaders or hydraulic shovels into haul trucks for transport from the working face to the primary crusher(s). After being reduced in size in the primary crusher, the rock will be transported via conveyor to a surge pile located near the secondary crusher(s) that will feed the processing plant. The different aggregate products will be stockpiled according to size and rinsed on wash screens prior to being loaded into ships or barges for transport to end use markets.

The anticipated plant operating schedule is 16 hr/day, 7 days/week for nine months per year (weather permitting). The quarry will operate 16 hr/day at peak production, over nine months of the year. The marine operations will run 24 hr/day, 7 days per week all year to accommodate shipping schedules and the time needed to load ships. The Project will employ 60 to 100 persons full time at peak production. Drilling and blasting activities will require additional personnel that may be subcontracted to a professional blasting company.

All shipping and associated activities (crews, provisions, refueling and other supplies, waste management, etc.) will be contracted to a third party. Ships will depart from the marine terminal under the control and supervision of the Canadian Coast Guard's Eastern Canada Vessel Traffic Services Zone and will enter nearby shipping lanes currently used by marine traffic accessing the Strait of Canso Port. Aggregate shipping will exit Chedabucto Bay in an easterly direction and access domestic commercial shipping lanes currently used by a range of tanker, bulk and containerized cargo carriers. Project related

shipping will remain far from the nearest federal Marine Protected Area, namely The Gully located approximately 250 km southeast of Canso. The nearest terrestrial federal land is the Canso Islands National Historic Site of Canada near Canso.

The ships will not pass near any National Wildlife Areas although ships will pass to the south of the Port Joli, Port Hebert, Sable River and Haley Lake Migratory Bird Sanctuaries. These Sanctuaries are located along Nova Scotia's southwestern shore and together form the South Shore Important Bird Area.

Table ES-2 lists the anticipated potential federal permits required to undertaken the Project.

Table ES-2 Anticipated Potential Federal Permit Requirements

| Regulatory Requirement | Approval/Permit | Sections | Project Activity/Trigger | Responsible Agency |
|--|------------------------|------------------|--|-----------------------------|
| FEDERAL | | | | |
| Fisheries Act | Authorization | S. 35(2)(b) | Marine terminal construction, blasting in the near shore area; quarry activities through or adjacent to watercourses | Fisheries and Oceans Canada |
| Navigable Waters Protection Act / Navigation Protection Act | NWPA Permit | TBD ¹ | Marine terminal construction, installation of watercourse crossings | Transport Canada |
| Canadian Environmental Protection Act, 1999 | Disposal at Sea Permit | S. 127/128 | Dredging in preparation for marine terminal construction | Environment Canada |
| Explosives Act | Magazine Licence | S. 7 | On-site preparation & storage of explosives | NRCan |

Proposed Schedule

The following tentative schedule is proposed:

- File Project Description – February 28, 2014
- Posting of the Notice of Commencement – estimated May 1, 2014
- Environmental Baseline Studies – complete by September 1, 2014
- File Environmental Impact Statement (EIS) - November 1, 2014
- EA Approval – estimated September 1, 2015 (please see note below).
- Current Market Evaluation and Sales Yard Development - March 2016-March 2018
- Site Preparation and Construction – April 2018 – April 2021
- Commence Operation – May 2021
- Decommissioning and Reclamation – 2070+.

Please note that if the Project is subject to an EA by the CEA Agency, it can take up to one year (365 days) of government time to complete the EA starting when the Notice of Assessment is posted. Should the Project be subject to an EA by Review Panel, this period is two years.

¹ As noted, it is anticipated that the amendments to the NWPA will come into force in April 2014.

Emissions, Discharges and Waste

Dust emissions resulting from quarry construction and operations will be controlled through equipment design technology and/or with the application of water. Fuel combustion emissions associated with the Project include: sulphur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂), and particulate matter (PM). Noise and vibrations will be generated by blasting, processing and general operations. Sound levels for the operation of the quarry will be maintained so as to not exceed the Pit and Quarry Guidelines at the boundaries of the Project site.

To the extent possible, aggregate wash water will be recycled and reused. A closed circuit configuration of settling ponds will be employed in accordance with industry best practices and Nova Scotia Department of Environment (NSE) requirements. These controls will ensure that stormwater runoff and process wash water is managed so that discharges will meet the water quality requirements expressed in the Pit and Quarry Guidelines.

Precipitation and groundwater infiltration will collect in sump pits excavated within the quarry floor. Water pumped from the pits will be treated in settling ponds where required. Additional ponds will be constructed in the lay-down area to manage wash water from the processing plant. Sediment that accumulates in the ponds will be excavated on a regular basis, stockpiled during operation and used in progressive reclamation as needed.

Solid waste will be generally limited to office and domestic refuse. All solid waste will be stored onsite until such time that it can be transported to a provincially-approved waste disposal facility. Hazardous waste consisting primarily of used oil will be collected by a company licensed to transport this material and disposed of at an accredited off-site disposal facility.

Existing Environmental Conditions and Potential Effects

A number of environmental studies have been conducted on the property. These studies include: ambient noise condition assessment, fish, fish habitat and surface water quality assessment, wetland type identification and delineation, marine benthic habitat assessment, marine invertebrate community survey, marine sediment survey, marine bathymetric survey, early and late summer vascular plant and lichen surveys, two odonates surveys (dragonflies and damselflies) and bird surveys conducted on six occasions. Mammal and herptile (reptile and amphibian) surveys were conducted simultaneously with the other surveys. No larger scale, regional studies have been conducted in this area.

Most of the property is covered by thin soils hosting a mosaic of barren vegetation, tall shrub barren, and some coniferous forest. There are also patches of mixed forest and wetlands. A total of 26 wetlands were delineated within the Project site totaling 48 hectares. One vascular plant species of conservation concern was detected on the Project site. Southern twayblade (*Listera australis*) is listed as Red by Nova Scotia Department of Natural Resources (NSDNR) and has an Atlantic Canada Conservation Data Centre (ACDC) rarity rank of S1. No plant species at risk listed by SARA, COSEWIC or in the Nova Scotia *Endangered Species Act* (NSESA) were identified in the field.

The site also contains three small unnamed watercourses (two of which are intermittent) as well as Fogherty Lake. None of these water features appear to contain fish, apparently due to their naturally elevated acidity.

The immediate marine environment consists primarily of cobble, rock, and large boulders with lesser amounts of sand and silt. The sea floor bottom is hard and has algal cover which provides habitat for many marine fauna including molluscs, lobster, fish and invertebrates. Algal cover is sparse in deeper waters but increases markedly in near shore areas. The algal canopy is dominated by the brown algal species black whip weed (*Chordaria flagelliformis*), bladderwrack (*Fucus sp.*), and sea colander (*Agarum clathratum*). Other marine plant species present include red alga (*Leptophyllum sp.*), green alga (*Acrosiphonia arcta*), Irish moss (*Chondrus crispus*), kelp (*Laminaria sccharina*) and tube weed (*Polysiphonia lanosa*). None of these plants are listed in the *Species at Risk Act*.

Construction of the marine terminal is anticipated to result in the destruction of marine fish habitat (and by extension, marine plants) through direct loss of sea bottom and water column habitat in the zone occupied by the terminal. Harm to or death of fish may occur during construction from the placement of terminal infrastructure or the re-suspension of bottom sediments. Harm or death may also occur during operation from collisions or other interactions with vessels, accidental aggregate spillage, or other accidents or malfunctions (e.g., fuel spills). Other aquatic species that may be present in the marine environment, such as marine plants, whales, turtles and seals, may also be exposed to harm during construction and operation of the marine terminal. In addition, lobster fishers may be excluded from fishing areas near the terminal.

The Project site is host to many bird populations including four species listed by NSDNR as Yellow or sensitive. The entire coastline extending west to Guysborough and east to Canso is known to potentially host Harlequin Ducks, a federally-designated species at risk. Mammal species present are typical of the area and no listed species were identified during land and marine surveys.

Air emissions associated with the Project include particulate matter from aggregate quarrying, processing, transfer and loading operations and emissions of combustion by-products associated with the use of fossil fuels to power equipment associated with the quarry, processing plant and marine load-out and terminal operations. The Project will generate noise from equipment operation, back-up alarms, drilling and blasting, and transport and loading of rock and aggregate throughout the site. Direct and indirect effects on surface water features including Fogherty Lake are possible as quarrying proceeds. It is anticipated that some wetland habitat will be lost and / or altered as a result of the Project. If rock is quarried below the groundwater table, then dewatering may be required, and the effects (if any) on nearby groundwater elevations will be evaluated. There is potential for the Project to interact with plant species of special concern. Quarry development can result in the loss of wildlife and habitat and the disruption of wildlife species during critical life stages.

There is also the potential to negatively interact with migratory birds during Project operation. Noise generated at the Project site will include blasting several times per week, rock transport to the plant, activities at the processing plant (primarily crushing and washing) and load-out to the waiting ship. These noise sources may negatively affect migration, feeding, nesting, breeding and other behaviours. Project lighting within the quarry, at the processing plant, and at the marine terminal also has the potential to interfere with migrating birds and negatively affect their health and life cycles. In addition, the Project may impact Harlequin Ducks, which are known to inhabit coastal areas along Chedabucto Bay and which are protected under the *Migratory Birds Convention Act, 1994*.

Given that shipping will occur through federal lands, there is a potential for impact to these waters through a shipping accident or malfunction at sea (such as an oil spill), vessel collision, or vessel grounding. These potential impacts are typically mitigated through vessel design, maintenance and equipment testing, and emergency preparedness and response training. Impacts from aggregate shipping may also

take the form of emissions to atmosphere (primarily greenhouse gases and other fuel combustion residues), accidental discharge of ballast water or other waste, noise both above and below the waterline, and collisions with fish, marine mammals and other biota.

Ballast and bilge water may contain non-native or invasive plants, animals, viruses and bacteria as well as hydrocarbons. Below water, shipboard noise may interfere with marine species that rely on sound for orientation, communication and feeding. Above water, noise may disrupt feeding, migrating, or resting birds. Ship lights can also attract and/or disorient birds and other marine species. It is not anticipated that shipping will effect any changes to aquatic species at risk.

Social Setting and Consultation

The adjacent communities of Half Island Cove located 2.0 km west and Fox Island Main located 2.5 km east of the property boundary are rural in character and low in population density. Residential development in the vicinity of the Project is relatively sparse, with no residential structures within 500 m of the site boundary, 11 residences within 1.0 km, and fewer than 50 within 2.0 km. The nearest residence is approximately 690 m west of the property boundary along Half Island Cove Road. A cluster of five residences is located along Route 16 approximately 750 m southwest of the property boundary.

The Project site does not include any First Nation Reserve Land although it is located within Mi'kmaq traditional territory. The nearest First Nation community is Chapel Hill, located on Cape Breton Island approximately 58 km north of the Project (155 km by road). On the mainland, the nearest First Nation community is Paq'tnkek composed of Pomquet - Paq'tnkek, Franklin Manor, and Summerside. Pomquet - Paq'tnkek #23 is located at Heatherton, 24 km east of Antigonish, approximately 68 km west of the Project (90 km by road). At this time, it is not known whether any Aboriginal groups or persons hold commercial fishing licences in areas that could be affected by the Project.

A Mi'kmaw Ecological Knowledge Study (MEKS) was completed for the Project in 2013. The Project will require use of lands and resources that are reportedly used for traditional purposes by Aboriginal peoples. Given this, there is a potential for loss of access to wildlife and plant resources and potential harvesting areas. In addition, noise disturbance and dust from quarrying activities may adversely impact wildlife resources and depreciate the quality of local food and medicinal plants. There is also the potential for negative impacts to the marine environment from accidental aggregate spillage. Nevertheless, the MEKS concludes that it is unlikely the Project will have any negative effects on traditional land use provided the recommended mitigation measures are implemented. The Project has the potential to bring positive changes to the Aboriginal socio-economic environment in the form of long term, well paying jobs for members of nearby First Nation Communities.

Since 2010, Morien has undertaken a number of one-on-one discussions with a variety of stakeholders including NSDNR staff, DFO, municipal officials such as the Warden and councillors of MODG; the MODG Regional Development Authority; the Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO); the Paq'tnkek First Nations Chief; local fishermen; and a number of community residents. Table ES-3 provides a list of consultation undertaken with the various jurisdictions and other parties to date.

Table ES-3 Consultation Undertaken to Date

| Event and Party Contacted | Purpose | Date and Location | Number of Attendees | Issues Raised |
|---|--|--|--|---|
| Meeting with DFO | Discuss wharf design and compensation requirements | January 18 th , 2012 at BIO | 4 | None. Open discussion and transfer of information. |
| Meeting with 4 fishermen who have licenses in project area (1 has since been sold) | Discussed general project, location and potential impacts as well the fisherman gave input as to best location for the wharf | July 21, 2011, at store near Project site | 6 | Some concerns initially about loss of fishing grounds, but concerns were lessened once the smaller wharf footprint was discussed. |
| High school presentations | Inform students and their teachers about nature and scope of Project | October 12, 2011, at Canso and Guysborough high schools | Entire school in Canso ~75; junior & senior class at Guysborough ~50 | Most questions were about employment opportunities and what skills would be needed. |
| Meeting with KMK Mining Table | Project presentation to the KMK | November 21, 2011, at Membertou Conf. Center, Sydney. | 7 | Discussion regarding the need for an MOU between Erdene (now Morien) and KMK, and who was to do the MEKS. |
| Telephone conversation with newspaper reporter | Reporter from the Antigonish Casket wanted info. on the project | January 4, 2012, via phone from Halifax Airport | 2 | Corey Leblanc sought project information, wanted to know why this location and where we were in the process. |
| Conversation with Brent Lombardo (area resident) | Discussed project while on plane to US | January 4, 2012 | 2 | Provided contact information with people who could help with project such as Nancy O'Regan a Curriculum Coordinator with NSCC and others. |
| Meetings with MODG | Update Council on project status | Several between 2008-2011 at the municipality | ~12 | Wanted to stay informed on the project's progress/issues. |
| Consultations Since February 2012 | | | | |
| Private Lands Acquisition | Acquisition of private land parcels at Black Point | Numerous interactions via legal counsel from Feb 2012 to October 2013 | ~ 40 | Contact heirs to the 2 private land parcels to purchase their interests, regular updates to MoDG |
| Agreement with MoDG | Negotiations with MoDG regarding development of quarry on Municipality lands | Numerous discussions and meetings from Jan. to Aug. 2013 at the municipality | Several representatives each from MoDG and Morien | Negotiate mutually agreeable terms for agreement. |
| Presentation to MoDG Council | Present update on Project status | March 13, 2013 at the municipality | 15 | None. Open discussion and information exchange. |
| Attended MoDG Council Meeting | Council decision on expropriation of private land parcels | October 9, 2013 at the municipality | MoDG Council and general public | Council voted in favour of expropriation for purpose of developing quarry at BP |

| Event and Party Contacted | Purpose | Date and Location | Number of Attendees | Issues Raised |
|--|---|--|--|---|
| Site visits to Black point | Visit the site with potential investors / operating partner | April 15-16, 2013; September 23-24, 2013 at the Project site | 11 including MoDG Councilor B. George and local fisherman B. Hendsbee | None. Potential investors were impressed by local support for the Project, including local fishermen. |
| Meetings with NSDNR | Meet with Lands Branch at NSDNR to discuss requirements for Crown Lease for Submerged Lands | January 2013, February 5, 2014 in Halifax (Hollis St.) | Gretchen Pohlkamp; Arlene d'Eon | Discussed requirements for acquiring Crown Lease for near-shore submerged lands for the construction of marine load-out facility |
| Interactions with CEAA | Several in-person meetings, phone conversations and emails to update on project status and projected date for submitting EA application | March 4, 2012 May 14, 2012 May-Aug. 2013 Sept. 4, 2013 Sept. 13, 2013 Jan-Feb 2014 in Halifax | Several CEAA representatives (V. Rodrigues, F. Kirstein, M. Atkinson, B. Cogle) | None. Information exchange and review of new federal legislation (CEAA 2012) |
| Teleconference with NS Environment | Discussion regarding federal-provincial harmonization for EA | Feb 5, 2014 | H. MacPhail | Discussed numerous aspects of the project including impact and compensation for wetlands, harmonization process, project update, etc. |
| Multiple telephone calls with Helen MacPhail and Paul Keats, NSE; James Sandall, NSPI; Paul Colton and Brian Ross, NSTIR and John Dobson, NSDNR | Provided information regarding upcoming site drilling to further define resource estimate and to obtain approval to access the site | Feb 6-Feb26, 2014 from Halifax | 6 | None. For information purposes only |
| Meeting with Premier Stephn MacNeil and MLA Lloyd Hines | Introduce the Project and Project Proponents | Feb 18, 2014 in Halifax | 6 | Discussed the anticipated Project schedule and employment opportunities |
| Meeting with Laurent Jonart, Office of Aboriginal Affairs | Introduce the Project and Project Proponents | Feb 25, 2014, in Halifax | 4 | Discussed potential issues of interest to the various First Nation Communities |
| Inter-agency (federal and provincial) meeting | Present Project and Project Proponents, discuss work conducted to date, discuss draft Project Description | Feb. 26, 2014 in Halifax at the CEAA office | 14 present, two on the telephone. Agencies included CEAA, NSE, OAA, DFO, TC, EC, HC, and NRCan | Discussed Project timelines and subjects required to complete the Project Description. Obtained guidance on moving into the Environmental Assessment process. |
| Twila Gaudet, KMK | Email correspondence to set a | 11/02/2014 | 2 | Meeting date and time confirmed for |

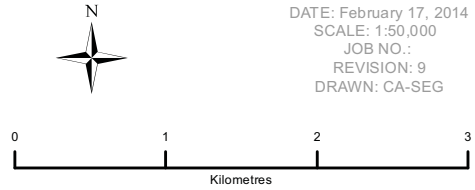
| Event and Party Contacted | Purpose | Date and Location | Number of Attendees | Issues Raised |
|---------------------------|---|--|---------------------|----------------|
| | meeting time and place to present the Project | 24/02/2014 25/02/2014 26/02/2014 27/02/2014 | | March 11, 2014 |

Aboriginal and non-aboriginal engagement will continue throughout the course of the EA process. All aboriginal engagement activities will be undertaken in accordance with the principles and procedures established by the KMK and the United Nations Declaration on the Rights of Indigenous Peoples. The Proponent will work closely with provincial and federal government officials who will be conducting consultation with First Nations regarding the Project.



REFERENCES:
 Base data is from NSDNR (2010), GeoNova (2009), GeoBase (2007).
 Wetland data and Wilderness Area from NSDNR (2007). Property Boundary
 data from SNS (2011). Access Road location provided by AECOM (2011).

| Map Features | | |
|---|-----------------------|-------------------|
| ■ Building | — Transmission Line | ■ Waterbody |
| --- Cut Line (> 100m long & < 20m wide) | — Property Boundary | ■ Wilderness Area |
| — Major Road | — Study Area Boundary | ■ NSDNR Wetland |
| — Secondary Road | — Contour Line | |
| — Tertiary Road | — Watercourse | |



DATE: February 17, 2014
 SCALE: 1:50,000
 JOB NO.:
 REVISION: 9
 DRAWN: CA-SEG



Figure ES - 1

Project Location

Proposed Black Point Quarry Project
 Morien Resources Corp.

Figure ES - 2
Conceptual Site Plan
Proposed Black Point
Quarry Project

Legend

- Crown Survey
- Property Buffer 30m
- Ultimate Pit Boundary
- Fill Areas
- Plant Location
- Load Out
- Berms
- Power Line
- Entrance Road
- 30 m Buffer
- Undifferentiated Wetlands
- Coastal Marsh
- Creeks

0 125 250 500
Meters

