Summary - Beaver Dam Mine Project Description

Beaver Dam Mines Road
Marinette, Nova Scotia

Atlantic Gold Corporation

October 5, 2015

45 Akerley Boulevard Dartmouth Nova Scotia B3B 1J7 Canada

088664 | Phase No 12 | | Report No 2

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1. General Information

1.1 Project Name, Nature and Proposed Location

Name of the Designated Project

The designated project will be known as the “Beaver Dam Mine Project” (the Project).

The Project Nature

The Beaver Dam Mine Project is contemplated to be a part of the Moose River Consolidated Gold Project that includes this proposal and the approved Touquoy Mine. The Beaver Dam Mine is planned to be operated as a satellite surface mine operating at a rate of approximately 2 million tonnes (Mt) of gold-bearing ore per year. Beaver Dam ore will be crushed and hauled by on-road trucks to the Touquoy Mine processing facility, a distance of just over 35 km. This ore will replace the supply from the Touquoy surface mine which will be exhausted after five years of operation. Critical debt financing for the development of the Touquoy Mine may be conditional on having permitting for the Beaver Dam Mine essentially complete.

The Touquoy Mine Project received Ministerial Approval for Environmental Assessment from Nova Scotia Environment on 1 February 2008. The project received Industrial Approval in March 2014 for construction, operation and decommissioning of a mine at Touquoy. The planned start date for construction for the Touquoy Mine is May 2016. In this case, Beaver Dam is scheduled to come into production in 2022, cease production in 2026, and then be reclaimed.

Project Location

The Project is located on Beaver Dam Mines Road, Marinette, Halifax County, Nova Scotia, approximately 7 km from Highway 224 (45E 03’ 57” N / 62E 43’ 05” W (NAD83 CSRS) NTS Map 11E/02). The Project involves access to haul roads (19 km) on private land and the use of Highway 224 (5km) and Mooseland Road (12 km) to truck ore to the processing plant at the Touquoy Mine at Moose River Gold Mines.

1.2 Proponent Information

Name of the Project Proponent

Atlantic Gold Corporation

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1.3 Results of Consultations

The following jurisdictions and parties have been consulted during the preparation of this project description:

Government

The Government of Canada

- Environment Canada
- The Canadian Environmental Assessment Agency

The Province of Nova Scotia

- Premier's Office
- Environment (Environmental Assessment, Wetlands, Protected Areas)
- Natural Resources (Geoscience and Mines, Crown Lands, Wildlife, Forestry)
- Labour and Advanced Education (Health and Safety - Technical Services)
- Transportation and Infrastructure Renewal
- Office of Aboriginal Affairs
- Finance (Statistics)

Halifax Regional Municipality

- Planning and Development

First Nations

- Confederacy of Mainland Mi'kmaq (Mainland Mi'kmaq Developments Inc.)
- Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO)
- Assembly of Nova Scotia Mi'kmaq Chiefs
- Sipekne'katik Band

Consultation with Public

A public consultation program to provide project details to local communities and provide an opportunity for public input to the proposed mine development will be undertaken once the project preliminary design phase and feasibility studies are complete. Currently only the landowner has been consulted on the nature of the project and site access.

Consultation with Regulators

For the Beaver Mine Dam Project, regulatory consultation began on 23rd October 2014 with a Provincial "One Window Process: Mineral Development in Nova Scotia" meeting to present the planned project and to receive feedback on the regulatory regime and regional expertise. Discussions have begun with Nova Scotia Environment to scope the Project for Environmental Assessment requirements. The Beaver Dam Mine Project requires a Class 1 environmental assessment under Nova Scotia provincial legislation. It is assumed that any changes to the Touquoy Project affected by the Beaver Dam Project (i.e. trucking, tailings, and processing) will be assessed as a function of the Beaver Dam Environmental Assessment.

A regulatory consultation was held on December 17th, 2014 to review the approach to the baseline studies for ecological components of the Project. The meeting was attended by representatives from NS Department of Natural Resources (NSDNR) (Wildlife Division) and Fisheries and Oceans Canada. Nova Scotia Environment was invited but did not attend.

NSDNR provided the following comments.

1) Document the decision making process related to placement of project infrastructure.
2) Document conclusions related to low risk of Acid Rock Drainage potential.
3) Species at risk legislation affords protection of habitat, so due diligence and protection of habitat is required for all species of conservation interest, regardless of the level of concern.
4) No winter blasting within 1km of known bat hibernacula. As such the desktop evaluation should be extended to a 2 km radius.
5) Bat hibernacula are highly non-random, and investigations of bat habitat potential should focus on habitat as described by Vanderwolf et al (2012).
6) Concerns were expressed over the presence of Boreal Felt Lichen (BFL), as identified in surveys completed by CRA in 2008. Further study and potential effects will be required.

DFO commented that field surveys need to confirm whether there is any connectivity between Cameron Flowage and the existing dis-used tailings pond, particularly as it relates to the American Eel.

Consultation with First Nations

Since the initiation of the Touquoy Project the proponent has engaged in a pro-active and mutually beneficial relationship with the Mi'kmaq of Nova Scotia. This relationship includes a Mi'kmaq Ecological Knowledge Study (MEKS) for Touquoy, an MEKS for Beaver Dam, hiring of Mi'kmaq workers during definition drilling at Beaver Dam and the development of a Memorandum of Understanding and a Mutual Benefits Agreement. The relationship has been close to 10 years in the making and continues to be of mutual benefit.

Since the Mi'kmaq Knowledge Study in respect of the Touquoy Mine Project was completed by the Confederacy of Mainland Mi'kmaq in December 2005 nine meetings between DDV Gold Ltd (the Proponent, now known as Atlantic Gold) and representatives of the Assembly of Mi'kmaq Chiefs and the KMK were held in advance of the signing of a Memorandum of Understanding between the Assembly and DDV Gold on 5 May 2014. The first of these meetings, between Chief Terry Paul and Wally Bucknell, took place on 24 September 2010. Most subsequent meetings were with

representatives of the KMK (Jennifer MacGillivary and Twila Gaudet) though on three occasions Assembly Chiefs were also present – Chiefs Terry Paul and Rufus Copage (1 March 2013), Chief Gerard Julian (8 November 2013) and Chief Terry Paul (25 April 2014). It should be noted that what may appear to be the slow pace of negotiations leading to the signing of the MOU was largely influenced by the Company's experiencing unrelated delays, and total project risk, occasioned by the necessary and troublesome acquisition of surface titles, a matter which was eventually resolved through the Courts on 28 February 2014.

Following the phone conference (November 2014) and meeting (January 2015) with KMK representatives since the MOU was signed scheduled funding has been provided by DDV Gold to the KMK, as agreed, in order for the KMK to progress the development and negotiation of a Mutual Benefits Agreement. Progress has been steady and satisfactory with ongoing phone and email communications, along with a site inspection by the KMK (Jennifer MacGillivary and Valerie Bowers) in April 2015. Relations between the parties are cordial and respectful and both parties are working cooperatively towards a satisfying and exemplary outcome in the near future.

As noted above the Memorandum of Understanding (MOU) between DDV Gold Ltd (Atlantic Gold's wholly-owned subsidiary) and the Assembly of Nova Scotia Mi'kmaq Chiefs has been concluded. The MOU establishes the mutual recognition and respect of each party's perspective in relation to the development of the Touquoy Project and Atlantic Gold's other potential resource developments (including the Beaver Dam Mine Project) elsewhere within Nova Scotia. In particular the MOU contemplates the negotiation and conclusion of a Mutual Benefits Agreement (MBA) between the parties to engage further and specifically in terms of employment, training, provision of services and other opportunities and undertakings to the benefit of both parties. Formal meetings commenced in January 2015 with the goal of completing the document and having it put into force early in the fourth quarter of 2015.

1.4 Applicable Regulatory Framework of Other Jurisdictions

In addition to Environmental Assessment (EA) approval from the Canadian Environmental Assessment Agency (CEAA) and/or Nova Scotia, Nova Scotia Environment (NSE) will require an Industrial Approval (IA) to construct, operate, reclaim and abandon a mine; and Water Approval, to alter waterbodies and/or wetlands within the mine development. Both approvals are as described under the Activities Designation Regulations (Nova Scotia *Environment Act*, 2014) and are discussed further herein.

Subsurface rights are owned by the Province of Nova Scotia and are currently licensed to the proponent for exploration purposes. A Mining Lease will be sought once the project receives Environmental Assessment Approval.

The Project falls within the Halifax Regional Municipality - Musquodoboit Valley/Dutch Settlement Municipal Plan Area. The Beaver Dam Mines Road, a private road owned by Northern Timber Nova Scotia Limited, originates in the Eastern Shore Municipal Planning Area. The mine area is zoned Mixed Use (MU) which allows for extractive activities (pers. comm. Faulkner 2015). Development and/or building permits will be required by the Municipality.

1.4.1 Description of Environmental Studies in the Region

A review of the CEAA and Nova Scotia Environmental Assessment project databases indicates that no regional environmental studies have been undertaken or are currently being conducted of the

region or in the vicinity of the designated project within the spatial confines of the databases. Studies have occurred within 80 km of the site; however, none of these projects includes the Beaver Dam site in their regional context.

No relevant regional studies of environmental effects from other projects are available.

2. Project Information

2.1 Project Context and Objectives

The Beaver Dam Mine is contemplated to be a part of the Moose River Consolidated Gold Project that includes this proposal and the approved Touquoy Mine. The Beaver Dam Mine is planned to be operated as a satellite surface mine operating at a rate of approximately 2 million tonnes (Mt) of gold-bearing ore per year. Beaver Dam ore will be crushed and hauled by on-road trucks to the Touquoy Mine processing facility, a distance of just over 35 km. This ore will replace the supply from the Touquoy surface mine which will be exhausted after five years of operation.

The planned start date for construction for the Touquoy Mine is May 2016. In this case, Beaver Dam would be scheduled to come into production in 2022 and cease production in 2026 and then be reclaimed. For context the Touquoy Mine components and permitting history are outlined below.

Changes to the Touquoy Mine as a result of the Beaver Dam Mine Project include an increase in the number of years of ore processing (4 more years), and deposition of tailings from Beaver Dam in the mined out Touquoy Pit. All other aspects of the Touquoy Mine remain the same as previously assessed including the disturbed footprint, tailings management aspects, size and locations of stockpiles and ore processing facilities.

2.2 Provisions to the Regulations Designating Physical Activities

The Project activity designated in the Schedule to the Regulations Designating Physical Activities (*CEAA*, 2012a) that may necessitate a federal environmental assessment for this Project is:

16(c) The construction, operation, decommissioning and abandonment of a new rare earth element mine or gold mine, other than a placer mine, with an ore production capacity of 600 t/day or more.

This Project Description provides information on the project components and potential environmental effects as described in Prescribed Information for a Description of a Designated Project Regulations (*CEAA*, 2012b). Further, the content of this document conforms to the “Guide to Preparing a Description of a Designated Project under *CEAA* 2012 (CEAA, March 2015).

2.3 Description of the Physical Works and Activities

The Beaver Dam Mine Project will comprise the development, operation, closure and reclamation of a surface gold mine at Marinette, Nova Scotia. This will consist of the development of an open pit, materials storage facility, mine haul roads, associated mine infrastructure for crushing and haul-out (*e.g.* on-site power generation and local supply systems, fuel storage, temporary offices), improvements to private roads, extending processing timeframes at the Moose River (Touquoy) mine site, and utilizing the mined-out Touquoy Pit, at Moose River Gold Mines, for wet tailings disposal.

The main elements of the Beaver Dam Mine Project are as follows:

- An open-pit mine from which 46.9 Mt of ore and waste rock will be excavated. The pit will be 900 m long and 300 to 450 m wide and will have a maximum depth of 170 m based on the current mining scenario;
- An average extraction rate of 35,480 tonnes of rock per day, for a daily ore production of 5480 t/d, over a 4-year period, including the pre-production year; (4 years of operation include 8 months of pre-production and 3.3 years of full production);
- The surface and groundwater that finds its way into the pit and the runoff from the waste rock piles will be collected using sumps and pumping stations. It will be directed to water collection basins and treated before being discharged into Cameron Flowage;
- An ore transport rate (via the haul road) of up to 6000 t/d to support a milling rate of approximately 5,000 t/d in the event of an interruption in the ore supply;
- A Run of Mine (ROM) and a low-grade ore stockpile, for a total of around 0.28 Mm^3;
- A net non-acid-generating waste rock pile, with a capacity of approximately 17 Mm^3 of waste rock;
- Overburden piles which will contain approximately 4.45 Mm^3 of material;
- Top soil and organics storage piles that will contain approximately 0.085 Mm^3 of material;
- Improvements to approximately 20 km of existing logging haul roads; including replacing three bridges and correcting/improving culverts;
- Tailings storage in the mined out Touquoy pit with a water cover on reclamation;
- Portable administrative, mine employee, and maintenance buildings, a petroleum product storage facility, portable generator sets, ore crushers and load out area.

The total development area of the Beaver Dam Mine Project is approximately 128 hectares (ha) as detailed below. Upgrades to existing road infrastructure, such as minor widening, improving the road base, ditching, bridges spanning watercourses, and other potential improvements will also occur.

i. Ore extraction area (open pit) (30 ha);
ii. Materials storage (waste rock, overburden) (83 ha);
iii. Crusher and other associated mine infrastructure (15 ha);
iv. Improved haul roads (20 km).

Operations at Beaver Dam (Figure 3) would include mining, crushing, and operation of a waste rock storage facility. No ore processing, other than physical crushing to optimal size for transport, will be required at the site. No mine tailings will be generated at the Beaver Dam Mine site as there is no milling, only crushing to size of ore for transport. Maintenance facilities and office infrastructure will be minimal at Beaver Dam since these facilities will already exist at Touquoy. There are no electrical services near the Beaver Dam site; however, power requirements will not be substantial as there will be no processing of materials at the site, other than crushing to optimal size for transport. It is anticipated that power will be supplied by generators on site so there will be no requirement for power lines or any associated corridor that would be cleared if power was supplied from the provincial grid.

Two logging roads will require upgrades to support vehicle traffic between Beaver Dam and Touquoy - Beaver Dam Mines Road (7.2 km) terminates at the Highway 224 and a cross road that extends approximately 12.1 km from Highway 224 to Mooseland Road. Both roads are in existence but require upgrades for the safe passage of two way traffic. The final footprint of the upgraded road will be essentially the same as the current therefore impacts to plant, animal or Mi'kmaq and /or archaeological resources are not anticipated.

Due to the timing of the Beaver Dam ore being processed at Touquoy, the Beaver Dam tailings will not be stored in the approved above ground tailings storage facility but instead would be permanently stored in the mined-out Touquoy Pit. This allows the Touquoy Mine footprint to be maintained as permitted and no tailings facility will be needed at the Beaver Dam Mine. The approved reclamation plan for Touquoy calls for the mined-out pit to be allowed to fill with water. At the end of production of the Beaver Dam tailings, the remaining space would naturally fill with water and the Beaver Dam tailings would be stored under a water cap, forming a shallower lake than was originally intended for the reclaimed Touquoy pit. "Wet" disposal is accepted internationally as a superior method of permanent tailings management as opposed to "dry" storage. The Beaver Dam pit will also fill with water and the site will be reclaimed to a point that is safe and stable, and consistent with the natural surroundings. All facilities will be removed, disturbed lands rehabilitated, and the property returned to otherwise functional use according to approved reclamation plans accepted practices at the time of closure.

2.4 Description of Production Capacity, Processes and Infrastructure

The Beaver Dam Mine is planned to be operated as a satellite surface mine operating at a rate of approximately 2 million tonnes (Mt) of gold-bearing ore per year. Beaver Dam ore will be crushed and hauled by on-road trucks to the Touquoy Mine processing facility, a distance of just over 35 km. This ore will replace the supply from the Touquoy surface mine which will be exhausted after five years of operation.

Mine Development

The surface mining operations are planned to be typical of similar small scale operations in generally flat terrain. The mine operations at Beaver Dam are planned to commence once ore extraction from the surface mine at Touquoy is virtually completed to allow for a smooth transition to processing Beaver Dam ore through the Touquoy plant. It is planned that most mobile equipment and some support facilities will be transported from Touquoy to Beaver Dam for re-use.

The footprint of the surface mine development is shown in Figure 2.

The open pit footprint and waste rock storage areas will be cleared and grubbed in advance of operations with the timing based on Environment Canada directives relative to bird nesting. Topsoil will be salvaged to a nearby stockpile for later use in reclamation activities. Glacial till overburden within the open pit footprint will be salvaged to a specific portion of the waste rock storage area for later use in reclamation activities.

Fresh water will be diverted away from contact with operations. Mine water generated within the pit area will be collected in sumps and dewatering wells and pumped by pipeline to sediment settling ponds. Treated water will then be released to the environment. Monitoring will ensure that released water meets regulatory requirements.

At Touquoy, the TMF acts as the settling pond. Collected water from the pit and plant areas is pumped to the TMF. There will also be ditching around the waste piles, with water from these ditches draining south to the TMF. No changes to this will occur as a result of the processing of Beaver Dam ore.

All water coming into contact with the Beaver Dam developments will be diverted to one of the two lined settling ponds that will be constructed, and once settled and considered environmentally stable, eventually drained into the Cameron Flowage watercourses to the north.

A settling pond (4800 m^2) will be located in the middle of the facilities area, just south of the Run of Mine (ROM) pad and stockpile. Water diversion ditches will be established surrounding the facilities area, as well as the ore stockpiles, that will divert collected surface water to this settling pond. The earthworks for the facilities are designed with enough relief that contact surface water will run by gravity into these surrounding diversion ditches, and into the settling pond. Settled water will be drained to the Cameron Flowage by gravity via a water diversion structure that runs downhill to the northeast of the settling pond, splitting the ore stockpile areas.

The second settling pond (1800 m^2) will be west of the open pit. Water collected from the WRSF, haul road and till stockpiles will be diverted by gravity to this settling pond via a water diversion channel that will be constructed from north side of the ROM pad, running north to the haul road, west along the haul road, and northwest around the open pit. Water collected from the open pit will be pumped directly to this settling pond. Settled water will be drained to the Cameron Flowage by gravity via a water diversion structure that runs northeast from the settling pond.

Water diversion ditches will be established surrounding the bases of the WRSF and till stockpiles. Relief is designed into these facilities so that surface water that comes into contact with them will run to the surrounding diversion ditches by gravity. The diversion ditches will be constructed so that collected water will be diverted to the main water diversion channel that feeds the settling pond west of the open pit. The ditches may need to be lined where they cross major geologic structures.

A berm surrounding the open pit will direct surface water away from the open pit and into the main water diversion channel that feeds the settling pond west of the open pit. An in-pit water diversion ditch will be established along the top bench of the open pit to intercept any surface water that makes it through the berm and comes into contact with the open pit. This ditch will direct water to in pit sumps for collection, where it will be pumped out of the pit.

Sub-horizontal drain holes will be established in the final open pit walls as they are exposed. On the active bench floor, the water that is collected from the these drain holes will be directed to a sump where it can be pumped from the pit. Ditches will be constructed into the pit berms to collect the water and direct it to a sump in an area where the bench is sufficiently wide. The water from the sump on one bench can be drained down to the next bench below and collect into another sump. Actual operating conditions and detailed engineering will determine how many bench sumps can be connected together before putting a pump in place to remove the collected water. Vertical boreholes will be drilled at the pit crest, and progressively on some benches as the pit is developed, and piezometers will be established to monitor groundwater levels.

All collected ground and surface water in the pit will be handled by submersible pumps installed in each active pit bottom as part of the flexible and moveable bench scale pumping system. The mine sump pumps will be connected to semi-permanent and permanent piping systems to convey water

through an HDPE pipe directly to the settling pond located west of the open pit. The in pit sumps will be installed with each box cut as the benching is advanced.

Two submersible pumps, each capable of handling 150m^3/hour of water at over 200m head, are included for pit sump dewatering.

General Operations

In the active mining area, in situ rock is drilled and blasted on 5 m bench heights. Diesel powered rotary drills will be used for production drilling and will also be used for horizontal highwall depressurization drilling on the ultimate pit walls. Blasting will occur approximately once or twice per week, at the same time of day.

Additional grade control drilling is carried out to better delineate the ore and waste rock in advance of mining. Ore and waste rock will be defined in the blasted rock material with a grade control system based on dedicated reverse circulation (RC) grade control drilling and sampling, and a fleet management system will keep track of each load.

A contract explosives supplier will provide the blasting materials for the mine. Ammonium nitrate and fuel oil (ANFO) will be used when blast holes are dry and mixed emulsion type of explosive will be utilized when blast holes are wet. Explosives and all accessories will be supplied on an as needed basis from the contractor's base location off site and delivered to the blast holes using the contractor's equipment. As the magazine will be off-site there is no requirement for an on-site magazine or associated permitting through Natural Resources Canada for this Project.

Diesel powered hydraulic excavators and a wheel loader will load both ore and waste rock into haul trucks. These loading units will also function to re-handle pit material, load overburden and topsoil, pit clean up, road construction and snow removal.

All ore will be loaded into off-highway rigid frame haul trucks and hauled to the Run of Mine (ROM) pad and primary crusher. All waste rock will be loaded into off-highway rigid frame haul trucks and hauled to the waste rock storage facility. If dust is generated from hauling in the warmer months of the year it will be controlled by applying water to the haul roads utilizing a specialized water truck.

At the ROM pad, haul trucks will dump ore material directly into the primary crusher, or place it in an active stockpile on the pad, to be re-handled as crusher feed later on. Crusher loading of the stockpiled ore will be accomplished with a diesel powered wheel loader.

At the waste rock storage facility, the haul trucks will dump waste rock, which will be spread into lifts by diesel powered track type dozers.

Mine operations support services will include:

1. Haul road maintenance
2. Pit floor and ramp maintenance
3. Ditching
4. Reclamation
5. Open pit dewatering
6. Open pit lighting

7. Mine safety and rescue
8. Transportation of personnel and operating supplies
9. Snow Removal

A fleet of diesel powered mobile equipment is specified to handle the above pit support activities.

Maintenance activities on the mine mobile fleet will be performed in a mine maintenance facility located near the primary crusher, as well as in the field. Fuel, lube and field maintenance will be performed with a mobile maintenance fleet of equipment by qualified staff.

Diesel fuel and lubricant storage will be located near the primary crusher, and a dedicated fuel and lube truck will deliver these materials to the mine and maintenance mobile fleet and diesel powered generators.

Diesel fuel is required for the mining fleet and power generators for equipment at Beaver Dam. Diesel will be supplied from local sources by road tankers and stored in approved, self bunded tanks. From here fuel will be distributed to equipment consumers by means of a dedicated fuel truck.

The fleet of road trucks required to transport crushed ore from Beaver Dam to the process plant at Touquoy will be refueled at Beaver Dam as needed using the fuel truck noted above.

The workforce at the Beaver Dam pit area will be approximately 100 persons working three shifts per day or approximately 25 persons per shift (includes 25 on leave at any time), an increase of approximately 25 persons from the Touquoy mining work force. This increase is due to the higher amount of waste material that will be mined to recover the two million tonnes of ore that will be produced annually as compared to Touquoy.

In addition, the trucking operation from Beaver Dam to Touquoy will create approximately 60 jobs which will be contract positions to drive the highway trucks and conduct road maintenance.

Crushing

Ore from the Beaver Dam pit will be delivered to the ROM pad and then direct dumped into the Primary Crusher. An auxiliary ROM stockpile will be developed to secure continuous supply to the mill if mining is suspended for any reason. Ore will be recovered and fed to the crusher by Front End Loader as necessary.

Three-stage crushing of the Beaver Dam ore is required similar to that at Touquoy; however, only primary crushing will be undertaken at Beaver Dam. This operation will reduce ore size nominally from 900 mm to 125 mm which will be fed to the Primary Ore stockpile by a short conveyor for loading into the road fleet for transfer to Touquoy. The truck loading will be by a wheeled front end loader. Once at Touquoy, the Beaver Dam ore will undergo secondary and tertiary crushing using the existing Touquoy facility.

The combined crushing circuit has been sized to match the grinding mill circuit at Touquoy with no change in capacity from the planned 2 Mt of ore per annum.

The Beaver Dam primary crushing circuit will use the primary crusher relocated from Touquoy or a new unit of similar capabilities.

Waste Rock Management

All waste rock removed from the open pit will be placed in the waste rock storage facility (WRSF), shown in Figure 2.

The WRSF will have a maximum height of 60 m above the existing ground surface, and will contain both overburden and waste rock. This height is not out of context with local topographic variations. A haul ramp along the north limit of the WRSF will provide access to all lifts. A separate area to contain unconsolidated overburden will be constructed with enough material to enable waste rock to be covered with a layer of overburden to aid in the reclamation process.

The waste rock storage facility will be built bottom-up in small lifts, spread out and compacted by track type dozers. Haul trucks will deliver the waste rock to the WRSF, then dump out either as free dump piles, or off the edge of an established dump lift over a safety berm. Once these smaller lifts reach 10 m in height, the face of the lift will be re-sloped to 3:1 for use in reclamation activities. Re-sloping will be done by track type dozers, motor graders and small hydraulic excavators.

The waste rock will be placed according to standard practices and will ensure compliance with regulatory compliance with respect to slopes, acid generating material (if any), and surface water run-off.

All runoff from the WRSF will be directed to a sediment settling pond prior to release of treated water to the environment.

Trucking

Crushed ore from the Beaver Dam pit will be transported to the Touquoy process plant by truck travelling along upgraded existing roads as highlighted in Figure 4. The route is Beaver Dam Mines Road to Highway 224 to logging roads herein referred to as the Moose River Cross Road to Mooseland Road.

The Beaver Dam Mines Road (7.7 km) is an unsealed private logging road of varying quality. The 5.4 km section of the public Highway 224 forming part of the link is a dual lane sealed road built to support heavy truck traffic. The Moose River Cross Rd (12.7 km) is a private logging road of varying condition. The Mooseland Road (11.9 km) is a provincially owned road that has sealed and unsealed sections, suitable for heavy traffic. It is intended that the logging roads will be upgraded and widened to two lanes with improved alignments to provide better curves and gradients where necessary to achieve an operational design speed of approximately 70 km/h.

Three bridges have been identified as requiring reconstruction and widening to achieve that condition with full passing safety. Culverts were investigated to determine the nature of the flow, which falls within three categories: Watercourse (potential for fish habitat); culvert (local drainage only); and, wetland drainage. Generally, the existing culverts will also require lengthening to allow for the wider running surface and shoulders and better drainage control. New bridges will be constructed so as to not impinge on water courses as the present ones do by using designs that favour spanning watercourses.

The addition of turning lanes at the intersections with Highway 224 is not necessary as the traffic volumes generated by the material movement do not exceed design code requirements.

Truck payloads will be consistent with the limits applied by the Nova Scotia Transportation and Infrastructure Renewal to comply with Spring Weight Restrictions when applicable.

Options under review for the movement of the crushed ore to Touquoy include rigid body trucks, or trucks with trailers, with gross vehicle mass consistent with the above restrictions.

Alternative daily operating conditions under consideration include a single 12 hour shift, two 8 hour shifts and three 8 hour shifts in order to optimize the ore movement.

Apart from some dwellings on Highway 224 that are already exposed to highway traffic which includes logging trucks and aggregate haulers, there are no other houses on the other roads that will be affected by these vehicles.

Approximately 20 highway trucks will be required to transport the ore from Beaver Dam to Touquoy. The exact number will depend on the hauling schedules, which will likely be a single 12 hour shift or two 8 hour shifts per day. This would mean approximately 60 individuals will be required to operate the highway transport fleet. The number of return truck trips per day will be 370 or between 23 and 31 trucks per hour for 12 or 16 hours per day, 350 days per year for the duration of the mine project (3.3 years). During construction and pre-production, the number of trips will be less (8 months).

The proposed truck traffic will double the existing traffic on the segment of Highway 224 (NSTIR 2015). Records of traffic volumes for five years between 2007 and 2013 show Annual Average Daily Traffic on Highway 224: Section 025 between Beaver Dam Mines Rd and Pleasant Valley Road ranges from 290 to 370 vehicles per day.

Processing and Tailings Management

Changes to the Touquoy Mine as a result of the Beaver Dam Mine Project include an increase in the number of years of ore processing (4 more years), and deposition of tailings from Beaver Dam in the mined out Touquoy Pit. All other aspects of the Touquoy Mine remain the same as previously assessed including the disturbed footprint, tailings management aspects, size and locations of stockpiles and ore processing facilities

Other than the primary ore crushing, there is no mineral processing to be undertaken at Beaver Dam. All processing will be completed at the Touquoy facility after the ore from the Touquoy pit has been exhausted. The Touquoy plant is designed to treat Beaver Dam ore with no modifications other than an increase in the total weight of grinding balls in the ball mill to accommodate the slightly harder ore from the Beaver Dam pit. This will not require any larger equipment.

There is no requirement for tailings management at Beaver Dam as all mineral processing will be done at the Touquoy facility. Tailings generated from this operation will be pumped to the mined-out Touquoy pit for storage and covered with water to create a lake during reclamation. The approved Touquoy Environmental assessment stated that the pit would be allowed to fill naturally with water over a period of time through precipitation, surface flow and groundwater in-flow. No change to this method is planned following the deposition of Beaver Dam tails, except that the time frame for refilling will be shorter given the decrease in available volume taken by the tailings.

Process water will be recycled from the Touquoy pit and from the Touquoy tailings management facility as required.

The Touquoy Pit is expected not to fill with water during the processing of Beaver Dam ore but if this does occur excess water will be pumped into the existing Touquoy tailings dam in order that it can pass through the waste water treatment system. Note that during operation of Touquoy, dewatering of the pit will occur with this water being directed to the TMF. As with Touquoy, it is expected that within two years of ceasing ore processing, the quality of water to be discharged will meet all provincial and federal standards without treatment. Preliminary test work has shown this to be the case but more detailed test work is ongoing and will be detailed in the Environmental Impact Statement (EIS) and/or Provincial Environmental Assessment Registration Document (EARD).

Electricity and Other Utilities

Electrical power will be required for the operation of equipment (pumps, conveyors, crushers) and for site office and service facilities. Because the Beaver Dam facility will not process ore on site, power requirements are relatively modest. It is anticipated that two 600 kVA portable generating units will be sufficient to provide power for on-site operations (one in operation and one on standby). This will mean that there will be no requirements to clear a right-of-way and construct power lines to connect to the provincial electrical power grid

Reclamation

The goal of the reclamation plan is to return land and water disturbed by development to a safe and stable condition compatible with the surrounding landscape and final land use. The plan will employ recognized reclamation best practices, acknowledged principles of ecological restoration, and consultation with relevant stakeholders. The site has been used for past mining and exploration activities (decline installed, roads, exploration camps, settling pond system, and small waste piles of rock and overburden along with successive tree harvesting and silviculture activities) for the last 100 plus years. Evidence of limited recreational use of the land (hunting, fishing and off-road vehicles) at the site suggests that these activities could be re-instated after the mining operation ceases and reclamation activities completed. The majority of the lands proposed for the mining operation and infrastructure are majority owned by a commercial forestry operation (Northern Timber) with a minority of land along haul roads belonging to the Provincial Crown and other forestry companies.

All marketable timber or biomass will be removed from the pit, crusher, and waste rock disposal areas. Organic debris (roots, stumps, brush) will be stockpiled and mulched to provide biomass for reclamation. Topsoil will be stockpiled and used for reclamation at closure. All reclaimed areas will be covered with overburden and growing medium to a depth matching the native surroundings.

At closure, all infrastructure will be removed. The open pit will be allowed to flood creating a lake with a variety of shorelines established. Re-contouring of the Waste Rock Storage Facility (WRSF), carried out progressively throughout the project life, will be completed. The Crusher site will be contoured to match the local topography.

Re-vegetation will employ hardy pioneer species and grasses to colonize disturbed areas and stabilize soil. Native species will be planted to hasten a return to a natural ecosystem reflecting the pre-development site.

All runoff in the vicinity of the open pit will be directed as dispersed flow into the open pit to speed filling. The flooded pit will have shallow wetlands along the pit perimeter, and will sustain wetlands

downstream of the pit. Runoff from stockpiles will be directed to settling ponds and/or the pit prior to release to the environment.

Decommissioning of the site will require approximately 3 to 5 years after cessation of operations. Two years will be needed to complete regrade and re-vegetation of the site, after which monitoring will continue until deemed no longer necessary – typically two to three years post-reclamation. The reclamation measures are designed to enable eventual abandonment of the site in a safe and stable state. The self-sustaining site will be compatible with the surrounding environment and future land use. The Project site is intended to be returned to its previous land use after mining: recreation and forestry. Other opportunities may exist for the site. The final disposition of the site will come from consultation with all stakeholders throughout the course of the Project life and adherence to applicable legislation.

The Beaver Dam tailings will stored in the mined-out Touquoy Pit. This allows for less disturbed footprint at the Touquoy Mine as additional tailings capacity would have to have been built at Beaver Dam Mine. The approved reclamation plan for Touquoy calls for the mined-out pit to be allowed to fill with water. At the end of production of the Beaver Dam ore, the remaining space would naturally fill with water and the Beaver Dam tailings would be stored under a water cap, forming a shallower lake than was originally intended for the reclaimed Touquoy pit. “Wet” disposal is accepted internationally as a superior method of permanent tailings management as opposed to “dry” storage. The Beaver Dam pit will also fill with water and the site will be reclaimed to a point that is safe and stable, and consistent with the natural surroundings.

2.5 Emissions, Discharges and Waste

Dust emissions resulting from mine construction and operation will be controlled with the application of water obtained from the settling ponds. Stockpiled soils and tills will be revegetated as piles become stabilized. With a relatively short mine life of less than four years, reclamation activities will be commencing within four years of disturbance.

Combustion emissions, including nitrogen oxides (NO_X), carbon monoxide (CO), carbon dioxide (CO_2), sulphur dioxide (SO_2), and particulate matter (PM), will be generated from the operation of Project equipment and vehicles and from the diesel generators producing on-site electrical energy. Emissions will be reduced by proper equipment selection, maintenance and inspection. Modern diesel engines utilizing low sulfur diesel fuels have reduced particulate and sulfur dioxide emissions compared to similar engines used in the past. Air quality monitoring will be conducted as per the conditions of an Industrial Approval (IA), Nova Scotia *Air Quality Regulations* and the National Ambient Air Quality Objectives.

Noise and vibration from blasting and equipment will be controlled by attenuation (the distance between a noise source and a receptor), vertical separation, and equipment design.

Sediment and erosion control measures will be in place throughout all phases of the Project to ensure that surface runoff generated during operations is appropriately managed. Surface runoff, as well as groundwater and precipitation in the open pit, will be directed or pumped to settling ponds for treatment prior to release to the environment. Water from the settling pond(s) may be used in for dust suppression, to the extent feasible. Settling pond development will be staged with the overall development and needs of the Project. Details regarding the settling pond volume required for the proposed mine will be defined during the detailed design and reported in the EIS and/or EARD. Final design details will be a requirement of the provincial IA application.

Water discharge will be monitored and sampled in accordance with the terms and conditions of the provincial IA. Monitoring will ensure that total suspended solids (TSS) levels do not exceed the approved final discharge limits. The Proponent is aware of the requirements of the *Metal Mining Effluent Regulations* (MMER) and will comply with said requirements as applicable to the site. Since this is a crush and haul operation with no processing on-site, effluent will generally be tested for TSS, metals and pH and any other requirements stemming from Environment Canada or the Province via the IA process.

Solid and hazardous waste generated onsite will be minimal and limited to office and domestic refuse and oily waste. Both waste streams will be transported to Touquoy for disposal within the plant stream of waste through legislated or approved methods. If a spill occurs, contaminated material will be removed from the site for disposal and recycling to an approved facility. No permanent domestic waste water disposal facility will be established. Toilet facilities and liquid waste disposal will be contracted out.

2.6 Project Phases and Scheduling

The construction of the Beaver Dam pit operations will be timed so that the ore supply to the Touquoy process plant will follow immediately after the Touquoy deposit has been exhausted and mining operations have ceased. There is expected to be a transition phase not exceeding two months during which time the primary crusher will be relocated from Touquoy and installed at Beaver Dam or a similar crusher installed at Beaver Dam, if required. The Touquoy facility will undergo routine maintenance in preparation to receive Beaver Dam ore and crushed and stockpiled ore will be processed at the Touquoy processing plant. Construction of the Beaver Dam site and upgrades to the Haul Road will be completed in the year prior to Touquoy pit operations ceasing.

Operation of the mine will be for 4 years (8 months of pre-production and 3.3 years of production) will include mining, crushing, hauling and processing operations.

Decommissioning of the site will require approximately 3 to 5 years after cessation of operations.

The following Table 1 briefly outlines the Project schedule and the relationship between activities at Touquoy and Beaver Dam.

Table 12 Approximate Mine Development, Operation and Reclamation Schedule

Event	Timeline
Touquoy Construction	Year -1.5
Touquoy Operation	Year 1 – 5
Beaver Dam Construction	Year 4
Beaver Dam Operation	Year 5 – 8
Touquoy Reclamation (WRSF, Tailings)/Monitoring	Year 6 – 9+
Beaver Dam Reclamation / Monitoring	Year 9 – 11+
Touquoy Reclamation (Plant, Pit) / Monitoring	Year 9 – 11+

3. Project Location Information

3.1 Project Location

Geographic Coordinates

The Beaver Dam Gold Mine Project is located at 45E 03' 57" N / 62E 43' 05" W (NAD83 CSRS) on Beaver Dam Mines Road, Marinette, Halifax County, Nova Scotia and found on NTS map sheet 11E/02 (Figure 1). The site is located approximately 7 km from Highway 224, which begins at Highway 7 in Sheet Harbour (23 km SE) and intersects Highway 336 at Upper Musquodoboit (20 km NW). Ore will be hauled to the Touquoy Mine for processing. The haulage route includes Beaver Dam Mines Road, Highway 224, a private road owned by Northern Timber, referred to herein as the Moose River Cross Road, and the Mooseland Road (Figure 4). The Touquoy Mine is located at 44E 59' 05" N / 62E 56' 30" W (NAD83 CSRS) in Moose River Gold Mines, Halifax County, Nova Scotia.

Legal Description and Ownership

The lands to be developed for the proposed Project are owned wholly by Northern Timber Nova Scotia Ltd. and will likely be leased by the Proponent. Currently, an access agreement with the land owner exists for exploration and environmental baseline study and assessment activities. Intrusive activities, such as drilling, test pitting or other disruptive activities are negotiated separately as required.

The properties used for the Project are described by reference to their Service Nova Scotia Parcel Identifiers (PIDs): 40201022, 41202334, 41202342, 40201030, 00541656, 40469405, 40201048, 40200941 (part), 40201063 (part), and access via PID 41215914. Buffers and ancillary structures such as ditching around the proposed waste rock stockpile location and access may require lease of land (PID 40219925) from the Province of Nova Scotia, however this will be determined in due course once environmental studies are completed and the final shape of the waste rock stockpile determined.

Proximity to Residences, Reserves and Federal Lands

The proposed mine is located approximately 6 km NNE from the nearest residence at Beaver Lake IR 17 (Figures 1 and 4). This area has a few permanent homes and seasonal cottages.

Beaver Lake IR 17 is the closest federal land to the Project site (5 km). The reserve abuts Highway 224 for 950 m. The Highway currently sees considerable heavy truck traffic from forestry and other resource operations in the area. The area beyond the reserve towards the mine site is use by the First Nations community for traditional purposes. These areas will not be disturbed by the mine construction. The haul road for ore between Beaver Dam Mine and the Touquoy Mill has been previously described in detail. The route is on private lands and has very limited documented or observed use noted as part of the environmental baseline studies for Touquoy (2004-2009) and Beaver Dam (2012-2015).

Known third party activities include fishing and hunting and possible furbearer harvesting by First Nations and non-First Nations peoples. The road presents opportunities for recreational vehicle use and foot traffic but the degree of use of the private road on private land is not well documented. The majority of the road's proximal lands are large blocks owned by Northern Pulp and other forestry

based companies and individuals. The use of the road for ore hauling does not appear to create onerous restrictions for present third party use to continue.

The next nearest federal lands are located approximately 20 km southeast of the site at Sheet Harbour.

4. Federal Involvement

4.1 Financial Support

No federal funding will be sought or has been received for this Project.

4.2 Description of Federal Land Used

No federal lands are being used or are proposed to be used for this Project.

4.3 List of Permits, Licences and other Authorizations

Federal and provincial environmental acts and regulations apply to Atlantic Gold in regards to the design, site preparation, construction, operation, and rehabilitation of the proposed mine. In addition to the environmental legislation, other acts and regulations relating to labour standards, mining practices, and other phases are applicable to the Project. Atlantic Gold is well aware of the applicable acts and regulations that pertain to the proposed undertaking. Atlantic Gold's Project team have demonstrated the ability to prepare the necessary information and design plans required to obtain permits and approvals, as well as the ability to operate within the requirements of such acts and regulations at previously completed surface mining projects in other first world jurisdictions. The following provides a listing of some pertinent acts that may be applicable for the undertaking and/or were considered in the preparation of Project Description. Further reference will be made to specific legislation in the EIS/EARD.

Federal Legislation

- Canada Wildlife Act and Regulations
- Canadian Environmental Assessment Act and Regulations
- Canadian Environmental Protection Act and Regulations
- Fisheries Act and Regulations
- Migratory Birds Convention Act and Regulations
- Transportation of Dangerous Goods Act and Regulations
- Species at Risk Act

No permit for navigable waters will be required.

Initial assessment along the haul road identified 27 watercourse crossings (24 culverts and 3 bridges). Only six of the culverts appeared to be installed correctly. The remaining eighteen watercourse crossing locations had poorly installed culverts (buried, caved in, plugged, hung, not present, water flowing through road base not culvert). Fish habitat potential at each crossing location will be determined in 2015. Road upgrades and culvert replacements are expected to

increase fish passage and habitat quality, given the number of current culverts that are poorly installed. Neither culvert upgrades nor bridge upgrades/replacements are expected to require a serious harm to fish authorization (Fisheries Act authorization 35(2)).

The Proponent will follow provincial processes for watercourse and wetland permitting and standard mitigation methods (both Nova Scotia Environment and DFO) will be adhered to for watercourse alteration, culvert installation and wetland alteration. Culvert installations will be completed in accordance with DFO guidelines for the design of fish passage for culverts in Nova Scotia (DFO February 2015). Should road re-alignment be required to ensure safe passage for two way truck traffic, the new road sections will be aligned at 90 degrees to the watercourse channel at the crossing location wherever possible.

In order to upgrade the road network from Beaver Dam to the Touquoy Mine, the road will be widened and re-aligned in sections to facilitate safe two way passage for trucks. During this design process, the Proponent will work to avoid wetland habitat where possible. Where not possible, wetland alteration permitting will be completed to support the road upgrade. Provincial wetland alteration permitting may trigger DFO serious harm to fish authorization if wetland habitat proposed for alteration is evaluated to be fish habitat and if impacts to wetland(s) are considered significant.

Blasting will be undertaken by a qualified contractor and explosives will be stored off-site. As the magazine will be off-site there is no requirement for an on-site magazine or associated permitting through Natural Resources Canada for this Project.

The government of Nova Scotia employs a “One Window” process for reviewing, permitting and monitoring mine development projects in the province. This approach formalizes how government departments (including federal authorities) involved with mine development activities act collectively to streamline the review process for both government and industry.

Industrial Approval: An Industrial Approval (IA) defines specific operational conditions and limitations, including dust, noise, surface water and groundwater discharge criteria and monitoring plans. An IA application would be made by Atlantic Gold when EA approval is received.

Wetlands Alteration Approval: This approval will be required prior to altering any wetlands in the Project. The approval application will include a functional assessment of the wetlands in question and a compensation plan.

Provincial Legislation

- Environment Act and Regulations
- Dangerous Goods Transportation Act and Regulations
- Endangered Species Act and Regulations
- Labour Standards Code
- Mineral Resources Act and Regulations
- Crown Lands Act and Regulations
- Occupational Health and Safety Act and Regulations
- Wildlife Act and Regulations

5. Environmental Effects

5.1 Physical and Biological Setting

The site is located in the Eastern ecoregion, and further subdivided into the Eastern Interior ecodistrict. The ecoregion is underlain by quartzite and slate of the Meguma Supergroup, with granitic intrusives. A variety of landforms are found in this ecoregion, which include rolling till plains, drumlin fields, extensive rockland, and wetlands. The bedrock is highly visible in those areas where the glacial till is very thin, exposing the ridge topography. Where the till is thicker, the ridged topography is masked and thick softwood forests occur. There are a few drumlins and hills scattered throughout the ecodistrict with fine textured soils derived from slates.

The composition of the forests in this ecodistrict strongly reflects the depth of the soil profile. Thus, many climax compositions can be found throughout. On the shallow soils, repeated fires have reduced forest cover to scrub hardwoods such as red maple and white birch, with scattered white pine and black spruce underlain by a dense layer of ericaceous vegetation. However, on the deeper, well drained soils stands of red spruce will be found. On the crests and upper slopes of hills, drumlins, and some hummocks, stands of tolerant hardwood occur. Both beech and hemlock occur on these deeper, well drained soils, but their presence is usually individual and seldom of a high percentage in any stand. On the imperfectly and poorly drained soils, black spruce will dominate the stand composition.

Geology

The Beaver Dam site is in an area of Nova Scotia dominated by the Meguma Supergroup that includes the Halifax and Goldenville Groups. The regional and site specific drilling has encountered bedrock materials that consist mainly of metamorphosed sedimentary rocks of the Goldenville Group.

Historic and recent testing included analysis for acid rock drainage (ARD) potential, in accordance with the Sulphide Bearing Material Disposal Regulations. Results of the recent testing were instructive in indicating that the majority of the deposit is acid consuming but there are areas that will require specific handling and disposal. Recent testing of six samples of ore and waste rock showed that two of the six samples exceeded the 0.4% Sulphur (S) threshold and both of those having an acid generating potential in excess of the acid consuming potential while the remainder had net acid consuming potentials.

Additional work is planned to confirm ARD potential with the results of the hydrogeological and surface water sampling programs. As mining enters the development and production phases, routine geological and water quality monitoring will be required to confirm the low potential for acid generation.

Groundwater

The site hydrogeology consists of a fractured rock aquifer system which is overlain by a thin aquifer in the till. Based on previous studies of the hydrogeology of this deposit and others in the area the degree of hydraulic connection amongst the smaller bedrock fracture systems is likely poor to moderate, and the main zones that are capable of storing and transmitting relatively large amounts of groundwater are the larger scale faults. The water table is close to the surface across the Beaver Dam site, reflecting flat lying terrain, low permeability bedrock and the excess of annual rainfall over

evaporation. Thus, the bedrock sequence and part of the overlying tills will be saturated with groundwater under ambient conditions. Regional conditions indicate that groundwater is slightly basic (pH from 7.02 to 8.08) with elevated hardness (45- 160 mg/L). Certain metals such as aluminum, arsenic, manganese, strontium and zinc are elevated relative to guidelines for drinking water in Canada but within ranges found in groundwater in Nova Scotia.

Surface Water

The Beaver Dam Mine lies within the West River – Sheet Harbour drainage basin, which is directly east of the large Musquodoboit River Valley system. The watershed occupies an area of roughly 576 square kilometres which makes it one of the moderately sized watersheds in the Province. The West River – Sheet Harbour drainage basin is drained by the West River and its tributaries, from north to south. Elevation range within the catchment is 0 to 165 masl (metres above sea level), which varies from approximately 135 to 165 masl in the headwater areas and gradually decreases to sea level at the final outlet at Sheet Harbour. The headwaters of the drainage basin are located along the topographic divide separating it from the Musquodoboit River valley to the northwest.

The complex system of streams, lakes, bogs and wetlands in the drainage basin is a direct result of the underlying bedrock geology of greywacke and slate found in the region. These relatively impermeable and poorly jointed rocks result in slow groundwater recharge and most of the excess surface water is retained on the surface, often called a ‘deranged’ drainage pattern. The basin ultimately drains to the south via the West River, and discharge peaks are likely attenuated to a large extent by the numerous lakes and wetlands through which runoff is routed.

Wetlands

Wetland locations are determined by a combination of available information derived from the Nova Scotia Topographic Database, Nova Scotia Wetland Database, Nova Scotia Wet Areas Mapping, and aerial photo interpretation. If identified using the above noted data sources, the wetlands are considered “mapped wetlands”. This information is used to assist wetland specialists to identify the potential locations of wetlands for further field survey and assessment. Wetland surveys will consist of wetland delineation and evaluation including hydrological characterization, plant surveys, fauna surveys, species at risk surveys, and functions assessments. All of the mapped wetlands will be assessed during baseline environmental surveys (scheduled for the 2015 field season) and any additional wetland habitat within the Project Area will also be identified and evaluated. The following mapped wetlands have been identified:

- 7 hectare (ha) treed swamp (west of Project Area)
- 15 ha low shrub and aquatic vegetation fen system around Mud Lake
- 1.1 ha treed swamp south of Mud Lake
- 1 ha low shrub marsh east of Crusher Lake
- 1.35 ha low shrub marsh North of Crusher Lake
- 4.2 ha low shrub marsh south of Cameron Flowage
- 16.5 ha low shrub bog or fen west of Beaver Dam Mines Road

Several smaller additional wetlands were identified during the 2008 wetland assessment field program. All wetland habitats have been considered when planning the placement of project infrastructure.

Habitat

Within the Project Area, there are six different ecosites that were within the moist to fresh moisture regime, with poor to medium nutrient regimes. These ecosites generally support vegetation types from the Spruce-Pine and Spruce-Hemlock forest groups. In areas affected by natural or anthropogenic disturbance (such as wind throw or tree harvesting), early successional stands were determined to be in the mixed wood forest group. The dominant disturbance regime in the Project Area is timber harvesting, which is present in patches through upland forests. Generally speaking, uplands within the Project Area contain immature or uneven-aged coniferous stands or mixed wood stands. Several pockets of mature coniferous forests are scattered throughout the Project Area. Pure deciduous stands (including both tolerant and intolerant hardwood forests) are infrequent.

Vegetation

Botanical surveys were completed throughout the Project Area during baseline assessments in 2008, primarily in wetlands. A total of 141 species were identified, 5 of which are ranked S2 or S3. No S1 ranked, provincially, or federally listed species were identified during baseline surveys completed in 2008. Ranked species identified in 2008 include Marsh Marigold, Dwarf Rattlesnake-Plaintain, Downy Willow-herb, Small Bur-reed, and Dry-Spike Sedge.

Late season phenology surveys were completed over a 2-day period in Fall 2014 in a variety of habitat types across the Project Area. In total, 228 species were identified. No S1, S2 or S3 ranked species were identified, and none of the vascular plant species identified have legal status under provincial or federal species at risk legislation. Early season phenology surveys were completed in June 2015 across the Project Area.

The dominant vegetation habitat types within the Project area are reasonably well understood. The vegetation within these habitat types is both regionally and locally common. The habitats identified, with the expected species therein, are understood to contain a low likelihood of vascular plant species at risk. However, the greatest likelihood for plant species at risk is known to occur within wetlands within the identified habitats. Vascular plant surveys completed in 2008 and 2014 did not identify any species at risk. Further surveys are planned for 2015.

Lichen surveys were completed within the Project Area on February 19, and May 2-4, 2015. No Boreal Felt Lichen (SARA endangered, NSESA endangered) was identified within the Project Area. Several individual observations of Blue Felt Lichen (NSESA vulnerable) and Frosted Glass-whiskers (SARA special concern) were observed within the Project Area. No other listed lichen species at risk were identified within the Project Area. Three additional lichen species were identified within the Project Area that are ranked as sensitive (S1, S2 or S3) by the Atlantic Canada Conservation Data Centre (ACCDC) conservation status ranks.

Birds

Fall migration monitoring was completed in 2014 as part of an on-going avian use assessment. During fall migration monitoring, 817 individuals representing 47 species were identified in or near the Project Area. The following species at risk and species of conservation interest were identified: NSDNR yellow - Boreal Chickadee, Blackpoll Warbler, Golden-crowned Kinglet, Gray Jay, Pine

Siskin, Ruby-crowned Kinglet; NSDNR red - Common Loon; NSESA vulnerable and SARA special concern - Peregrine Falcon; and NSESA endangered and SARA special concern - Rusty Blackbird. Published and collected data and consultation with regulators will be used to further assess potential impacts to birds, including breeding birds.

Fifty-two bird species were observed during dedicated point count survey periods and within the 100m survey radius during the Spring Bird Migration Survey in 2015. An additional eight species were observed incidentally.

Total density of birds was estimated to be 832.89 birds/100 ha based on observations during the dedicated point count surveys. The three most common species observed were Magnolia warbler, dark-eyed junco, and white-throated sparrow.

Seven species of interest were observed during the dedicated survey periods: Common loon, spotted sandpiper, greater yellowlegs, Wilson's snipe, yellow-bellied flycatcher, boreal chickadee, and brown-headed cowbird. Three additional priority species were observed incidentally: Gray catbird, blackpoll warbler, and Wilson's warbler.

Watercourses and Aquatic Habitat

There are relatively few perennial watercourses throughout the Project Area. The main watercourse system is from Crusher Lake north to Mud Lake, which continues and drains into Cameron Flowage (Killag River). This system is confirmed fish habitat upstream to Crusher Lake, and fish (Brook Trout and Northern Redbelly Dace) were observed in 2015 within the inlet watercourse to Mud Lake from Crusher Lake. Brook trout was observed in gill nets in 2008 within Crusher Lake. Upstream and south of Crusher Lake, fish habitat has been confirmed with Slimy Sculpin and other undetermined fish species observed. Project infrastructure has been planned to avoid the watercourse system draining from Crusher Lake to Mud Lake. No disturbances to the water quality or quantity of Crusher Lake, Mud Lake or Cameron Flowage are expected.

Several ephemeral watercourses and small first order streams associated with Crusher/Mud Lake/Cameron Flowage system are present within the Project Area. A 16 ha headwater bog drains to the south located at the southern end of the Project Area. This system will be largely avoided by project infrastructure; and, fish habitat potential within this system is low. Fish were not observed in 2015 in first order stream systems associated with this headwater bog.

The man-made pond in the northeast section of the Project Area has been confirmed to be fish habitat. The Project Team observed Brook Trout, Northern Redbelly Dace and Lake Chub within the watercourse drainage channel leading east from this pond towards Cameron Flowage. There are no significant barriers to fish passage from Cameron Flowage to the man-made pond in the NE section of the Project Area. Brook Trout and Northern Redbelly Dace were also observed in 2015 west of the man-made pond in first order streams draining east into the pond. These systems will be impacted by the construction of pit infrastructure.

A watercourse system located on the southwest edge of the Project Area is in proximity to the waste rock storage location. This system is potential fish habitat, however will be avoided by project infrastructure. This watercourse drains south as Paul Brook, which is a tributary to the West River Sheet Harbour.

Surface water drainage is maintained by culverts of various sizes in the existing haul roads. The locations of culverts and bridges have been determined by surface water drainage and the need for

road access to forest stands. To a large extent, surface water flow is maintained by these culverts which have been placed to prevent or reduce erosion and undermining. In some areas, surface water drainage which is interrupted by the presence of the woods roads is directed down-gradient in road side ditches. In most cases, these ditches direct the drainage to a culvert or stream. Such anthropogenic activities have altered the natural habitat of the area and resulted in modifications to natural ecosystems.

Wood Turtle habitat is not likely present within the Project Area. Evaluation of larger watercourses systems (Crusher Lake to Mud Lake, and unnamed watercourse in southwest corner of the Study Area) was completed in 2015 for Wood Turtle habitat and species presence. No wood turtles were observed. Potential Snapping Turtle habitat is present within Cameron Flowage (Killag River). Consideration of these systems for Snapping Turtle was included in all surveys during the field season 2015. . No snapping turtle evidence was identified during 2015 field surveys.

Mammals and Wildlife

Mainland Moose tracks have been observed in two locations within the Project Area during 2014 fall surveys. No Mainland Moose signs were observed during winter track surveys. The Project team has observed incidental sightings of green frogs, wood frogs, red-backed salamanders, deer, coyote, raccoon, porcupine, rabbit, and squirrel.

One abandoned mine openings (AMO) has been identified as having low potential for bat hibernacula based on current condition (debris filled) and shaft length (with presence of high water table). Bat hibernacula are highly non-random, and investigations of bat habitat potential will focus on habitat.

The data collected during field assessments will be used to identify known, probable, or other habitat types, species locations, and the likelihood of species occurring within a specific area. The information collected in the preliminary stages will be used to create effective management strategies that avoid or protect species to the best extent that is possible.

SARA Listed Species

Prior to completion of biophysical studies within the Project area, assessment of wildlife, including vegetation and habitat was completed based on the requirements outlined in the Nova Scotia Environment (NSE) *Guide to Addressing Wildlife Species and Habitat in an EA Registration Document* (NSE September 2008). Development of a priority list of species for each taxonomic group was completed based on a compilation of listed species from the following sources:

1) Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and the Federal Species-at Risk Act (SARA 2003). All species listed as Endangered, Threatened, or of Special Concern.

2) Nova Scotia Endangered Species Act (NSESA 1999). All species listed as Endangered, Threatened, or Vulnerable.

3) Nova Scotia General Status of Wild Species: All species designated as Species of Conservation Concern (Red or Yellow).

This priority list of species was narrowed by broad geographic area. The priority list of species was then further narrowed by identifying specific habitat requirements for each species. For example, if

a listed NSESA species required open water lake habitat, and no open water lake habitat was present inside the Project footprint, this species would not be carried forward to the final list of priority species for field assessments.

SARA listed species identified within the Project Area during 2015 Assessments include: SARA threatened - Canada Warbler, Chimney Swift, Olive-sided Flycatcher; SARA Special Concern Peregrine Falcon, Rusty Blackbird, Frosted Glass Whiskers; COSEWIC Special Concern - Blue-Felt Lichen; and, COSEWIC Threatened - American Eel.

No SARA listed species of vascular plants were identified within the Project lands.

No SARA listed mammals were identified within the Project lands.

No SARA listed amphibians were identified within the Project lands.

No SARA listed reptiles were identified within the Project lands

Air Quality, Noise and Greenhouse Gases

Four locations have been sampled for baseline air quality in October 2014 for a 24-hour period in accordance with USEPA CFR 40 part 50 - Regulations for Ambient Particulate Sampling. Sampling equipment utilized by GHD consisted of high volume air samplers equipped with 8 inch X 10 inch glass fiber filters for sample collection.

Mining activities such as blasting, on site vehicle operations, crushing, and wind erosion from waste rock piles all can contribute to increased particulate levels. Based on Nova Scotia Air Quality Regulations; a significant adverse environmental effect with respect to total suspended particulate is one that would reduce air quality, such that the level of total suspended particulate matter exceeds 120 µg/m^3 over a 24 hour averaging period or 70 µg/m^3 over an annual averaging period.

All calculated values report well below the maximum permissible ground level concentration of 120 µg/m^3 as outlined in Schedule A of the Nova Scotia Air Quality Regulations.

Three locations were monitored in October 2014 and in November 2014 for 24-hour periods to gather data on daytime and night time noise levels utilizing a Quest Sound Pro SE/DL sound level meter with data logging capability. Average sound level values at each sample location for each time interval report below the maximum permissible sound levels of the Noise Measurement and Assessment Guidelines. Baseline monitoring of particulates and noise in and around the proposed pit location and waste rock storage pile are well below applicable NSE criteria. Particulate concentrations and noise levels are typical of forested rural areas.

The climate change and greenhouse gas discussion will address potential impacts during the all phases of operations including: emissions from heavy equipment operation and project traffic; accidental spills, and de-icing materials; adverse impacts to sensitive receptors; micro-climate modifications in the vicinity of the Project; and, potential human health related effects associated with the Project.

5.2 Human Environment

The nearest regional centres to the project are Sheet Harbour (23 km) and Middle Musquodoboit (40 km). These are small rural communities that provide basic supply needs to surrounding farm, forestry and fishing communities. Sheet Harbour, located 100 km East of Halifax on the Eastern

Shore, is a local service centre that provides basic needs to the local economy that is dependent on fishing, forestry and some extractive industries. Middle Musquodoboit, located about 70 km NE of Halifax is a farming/forestry community in the Musquodoboit Valley.

The proposed mine is located approximately 6 km NNE from the nearest residence at Beaver Lake IR 17. This area has a few permanent homes and seasonal cottages. Beaver Lake IR 17 is the closest federal land to the Project site. This property abuts Highway 224 which currently sees considerable heavy truck traffic from forestry and other resource operations in the area.

Current Land Use

The mine site has had previous exploration and mining activity. Other than the pond that was constructed in the 1980s, and the road network there are no other mine or exploration infrastructure remaining on the site. Commercially, the area was opened up for the forest harvesting activities. Access roads have been in place for decades and are used for access during exploration activities; others may use the roads from time-to-time for seasonal activities on the private land. Known third party activities include fishing and hunting and possible furbearer harvesting by First Nations and non-First Nations peoples. Most nearby First Nations activity is not on the mine site. The roads present opportunities for recreational vehicle use and foot traffic but the degree of use of the private road on private land is not well documented. The use of the road for ore hauling does not appear to create onerous restrictions for third party use to continue as it does now.

Socio-Economic Setting

The region is primarily dependent on resource industries, predominantly forestry, agriculture, and to a lesser extent, mining/quarrying. Mineral exploration activity in the region has been constant for decades but has grown and declined over the years depending on the economic conditions of the day. The mining industry represents a significant potential source of employment in this region that has historically seen considerable mining focus over the last 150 years. Forestry and tourism have fluctuated significantly in response to prevailing economic conditions. Due to the strong dependence on the resource sector, the economy is typified by “boom and bust” patterns. These key activities are anticipated to continue to form the basis of the regional economy.

The socio-economic effects of the Project can potentially be beneficial for the region, as it would provide employment locally and regionally. It could potentially reduce and possibly reverse an outward migration trend of people moving to larger centres. Atlantic Gold intends to work with local communities to maximize benefits through employment, business opportunities, training, and skills development.

Archaeological & Heritage Resources

An archaeological screening and reconnaissance at Beaver Dam Gold Mine was conducted in 2008 and revisited using the current site development plan in 2014 that included Beaver Dam Mines Road. On site the team identified the location of a sawmill and a possible cookhouse near the side of the pit. Recommendations that any development around the identified features would require shovel testing and intensified historical research. In addition, any development around Crusher Lake should be subjected to intensified reconnaissance. The Pit and Waste Rock Storage Pile study areas as they were oriented at the time of reconnaissance, were cleared of any requirement for further archaeological investigation.

In addition to work that has been completed to date and in light of subsequent changes in the project footprint, some follow up field reconnaissance work is required in 2015. If areas of heritage resources are to be impacted, further work will be undertaken to document these resources. If heritage resources are identified during construction or operation of the mine then all work will stop in the immediate vicinity until said resources can be further studied.

Traditional Use by First Nations People

A Mi'kmaq Ecological Knowledge Study (MEKS) completed according to the Mi'kmaq Ecological Knowledge Study Protocol (ANSMC 2007) was conducted in 2008 for Acadian Mining and updated in 2014 and 2015 for Atlantic Gold. Beaver Dam lies within Eskikewa'kik or the "skin dressing territory". This particular district spans from Halifax County across to Guysborough County. Various authors and historians have differed in their description of how far this territory expands, but all have agreed that Beaver Dam lies within this district.

Beaver Lake Indian Reserve 17 is located along Highway 224, approximately 6 km from the Mine site; and, is a satellite community associated with Millbrook First Nation. The reserve was established on March 2, 1867, is approximately 49.4 ha in size. There are five homes and 4 small seasonal cottages or hunting camps located on the property with an estimated population on reserve of 22 people. Lands surrounding the Reserve are used for traditional hunting and gathering; however, this does not extend to the Project area.

There is no land claim registered with the Specific Claims Branch of Indian and Northern Affairs Canada in Ottawa for any of the Mi'kmaq communities in Nova Scotia within the Project area.

In the event that Mi'kmaw archaeological deposits are encountered during construction or operation of the Project, all work should be halted and immediate contact should be made with the Nova Scotia Museum and The Confederacy of Mainland Mi'kmaq. Should the proposed project site change or expand, additional research will be conducted. Atlantic Gold will continue to communicate with the Mi'kmaq on a mutual benefits agreement that is founded in the Memorandum of Understanding developed for its Nova Scotia mining interests.

5.3 Effects of the Project on the Environment

The *Fisheries Act* protects the sustainability and productivity of recreational, commercial and Aboriginal fisheries. The likelihood of residual effects to fish, fish habitat, and aquatic resources from the Project will be based upon impacts of the Project to surface water quantity and quality. The distribution of fish in Project-area waterbodies is affected by the presence of natural barriers preventing many species from occupying the upstream reaches of creeks. Direct impact to fish bearing watercourses and waterbodies is not expected to occur from project infrastructure.

The *Migratory Birds Convention Act* protects migratory bird species. The potential effects related to migratory birds and that are associated with the construction and operation phases of the Beaver Dam Mine Project are as follows:

- Direct temporary and long-term loss of habitat for birds due to clearing and grubbing of the open pit and waste rock storage areas
- Destruction or displacement of birds in areas of excavation and piling of mine wastes

- Increase in dust levels from heavy machinery operation and a general increase in vehicular activity, amongst other things, may affect vegetative growth and indirectly cause a decrease in prey populations
- Bird injury and mortality from vehicle collisions and entrapment (i.e. in the open pit)
- Disturbance resulting from reduced habitat, anthropogenic noise and vibrations
- Attraction and disorientation resulting from night-lighting.

The *Species at Risk Act* protects wildlife species from becoming extinct through prohibitions against killing, harming, harassing, capturing or taking species-at-risk, and against destroying their critical habitats. Direct effect to aquatic species at risk, if identified within the Project Area are not expected, as watercourse and lakes within the Project Area are not expected to be directly affected by project infrastructure.

The potential effects of the project on the environment are as follows:

- The Beaver Dam deposit is characterized by low contents of potentially acid generating sulphide minerals. Thus, the potential for substantial acid generation would be expected to be limited by the low content of sulphide minerals in the area to be mined.
- The physical nature and extent of interaction between the groundwater and surface water and how they might be affected by mining is not yet known. Given the distance to the nearest residence, it is improbable that any potable groundwater resources will be affected.
- Discharges from the mine will only include surface water runoff and from the pit and stockpiles. All water will be captured in settling ponds to reduce total suspended solids (TSS) prior to release to the environment.
- Potential exists for a total loss of species and habitat during construction and operational activities within the operational footprint, but may be reduced for the ongoing maintenance and operations where possible. Introduction and spread of invasive and exotic species due to maintenance and operations will be of concern, but weed management programs will minimize the associated impacts.
- Potential impacts to the wetland systems may correlate to construction, operation and maintenance of projects within wetlands. Loss of wetlands in the proposed Project facilities footprint is expected to be the main effect to wetlands. Changes in surface water drainage patterns could result in indirect impacts to wetlands outside of the project area
- Wildlife Species listed under the Species at Risk Act, COSEWIC, NSESA, or NS Wildlife Act have the potential to occur, within the Project area. The Project has the potential to affect wildlife through the loss of habitat because of site clearing activities and disturbance from noise and Project related traffic and habitat fragmentation. The potential exists for increased mortality risk through clearing activities. Sensory disturbance can occur primarily through Project generated noise, as well as ingestion of contaminants directly or indirectly and dermal absorption. Studies indicate that wildlife populations may be expected to disperse from the area during periods of construction and/or operation. Assuming wildlife species are displaced from the Project lands, this will reduce the available habitat. However, this displacement is generally of short temporal disturbance as most cases reveal that wildlife returned after human activity has ceased.

- Air-borne particulate matter will be generated during construction and operation phases of the Project. The control of fugitive dust from the mining operations must centre on provision of moisture control measures, such as spraying with water as required. During construction, water from settling ponds and the ground water in-flow to the pit will be used for dust suppression. In-pit operations will not generally have much direct offsite impact, but could contribute to general dust levels at critical times if not controlled. Noise generated throughout the mining development and operation will included drilling and blasting, crushing and transport of ore that may negatively affect behaviours of birds and mammals. The noise from mining will be generally contained to the Project site. Given that there will be no residential buildings (6 km) located near the proposed open pit area, increases in suspended particulate matter and noise from operations, although adverse, will not affect residents in that area.
- The Project would provide many opportunities for employment in this part of Halifax County. The area has a rich natural resource history including mining and forestry. Mining jobs pay a premium over many other occupations and ranks number one in Nova Scotia in terms of weekly wages. Due to the distance (more than 5km) of the proposed Project site from most residences and groundwater users, impacts on existing and future adjacent land uses are not expected.
- The loss or destruction of heritage or archaeological resource material is a potential environmental effect of the Project. Based on the existing knowledge there is some small potential for the Project to interact with identified heritage resources that have been associated with historic mining at or near the site.

Changes to the environment are not expected to occur on federal lands, in a province other than the province in which the project is proposed to be carried out or outside of Canada.

5.4 Effects on Aboriginal Peoples

The Project will not require use of lands and resources that are reportedly used for traditional purposes by First Nations peoples. The MEKS concludes that it is unlikely the Project will have any negative effects on traditional land use provided that any recommended mitigation measures are implemented. The MEKS provided by CMM is instructive in outlining potential effects on aspects of the Project and have been described above. Health and socio-economic impacts were not clearly within the MEKS mandate or identified through consultation however Atlantic Gold can put forward possible impacts for these aspects and mitigation. Health is defined as overall health including mental, physical and spiritual for the Mi'kmaq and the Project does have the potential for negative and positive impacts. On the negative side there is the possibility that elevated levels (above background but not out of compliance with regulated limits) of particulate and noise associated with trucking could impact the Mi'kmaq residents in IR #17. This will be further examined during consultation with residents (some are seasonal) and with final road design requirements from the Province.

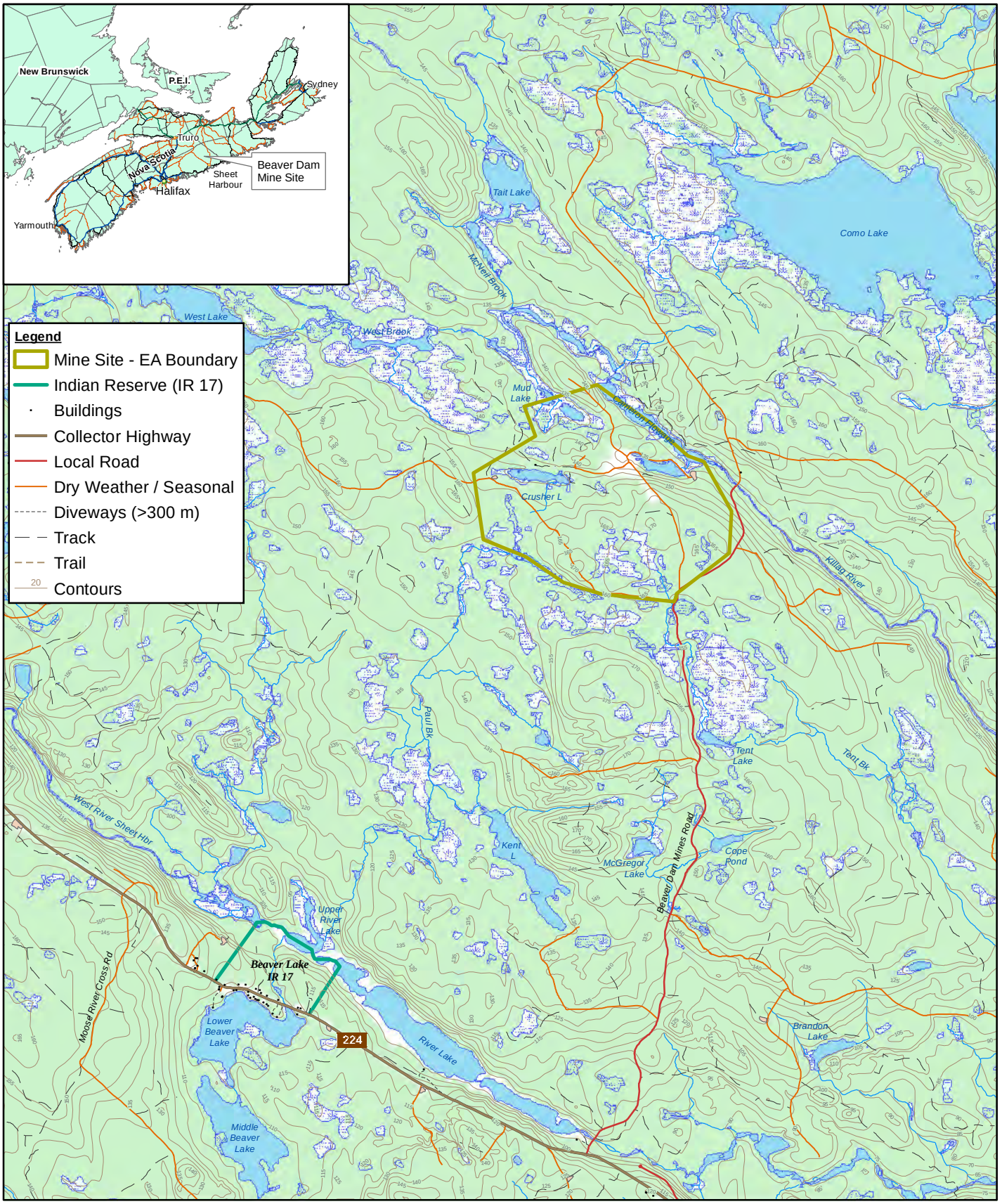
There is also the possibility that reduced harvesting (game, furbearers and medicinal plants) opportunities would occur along the ore haul route due to the trucks being present. The footprint of the road proposed for the project is minimally different from that at present day so if harvesting was occurring the losses would relate to safety concerns more than loss of habitat. As previously described as well the fish passage and habitat will be improved due to the project and therefore a net benefit to the Mi'kmaq after the ore hauling (4 years) ceases.

The Project has the potential to bring positive socioeconomic change in the form of well paying jobs for members of nearby First Nation Communities, that is in keeping with the Memorandum of

Understanding currently in place with the Proponent and any future Mutual Benefits Agreement that is negotiated.

Table 2 Significance of Potential Project Impacts on Mi'kmaq Land and Resource Use

POTENTIAL IMPACT	EVALUATION OF SIGNIFICANCE
The historic review of Mi'kmaq use and occupation documents Mi'kmaq use and occupation in the study area, and potentially the project area. A potential impact of the project is the disturbance of archaeological resources and burial site.	Mi'kmaq archaeological resources are extremely important to Mi'kmaq as a method of determining Mi'kmaq use and occupation of Mi'kma'ki and as an enduring record of the Mi'kmaq nation and culture across the centuries. Archaeological resources are irreplaceable. Any disturbance of Mi'kmaq archaeological resources is significant. The potential Burial sites are not located within the proposed project site, therefore, impact of the project is not likely significant.
Several species of significance to Mi'kmaq have been identified in the study areas. Permanent loss of some specimens is an impact of the Project.	The plant species of significance to Mi'kmaq identified within the study area exists within the surrounding area. The destruction of some specimens within the study areas does not pose a threat to Mi'kmaq use of the species. The impact of the permanent loss of some specimens of plant species of significance to Mi'kmaq is evaluated as not likely significant.
Hunting and trapping activities have been identified in the study area in relation to the haul road. Permanent loss of habitat is an impact of the project.	The potential for habitat loss is located around the wetlands around Tent Lake on the Beaver Dam Mine road. Habitat loss can be evaluated as significant.



Source: Service Nova Scotia

0 500 1,000 1,500
Meters

Coordinate System:
NAD 1983 CSRS UTM Zone 20N

ATLANTIC GOLD CORPORATION
MARINETTE, NOVA SCOTIA
BEAVER DAM MINE

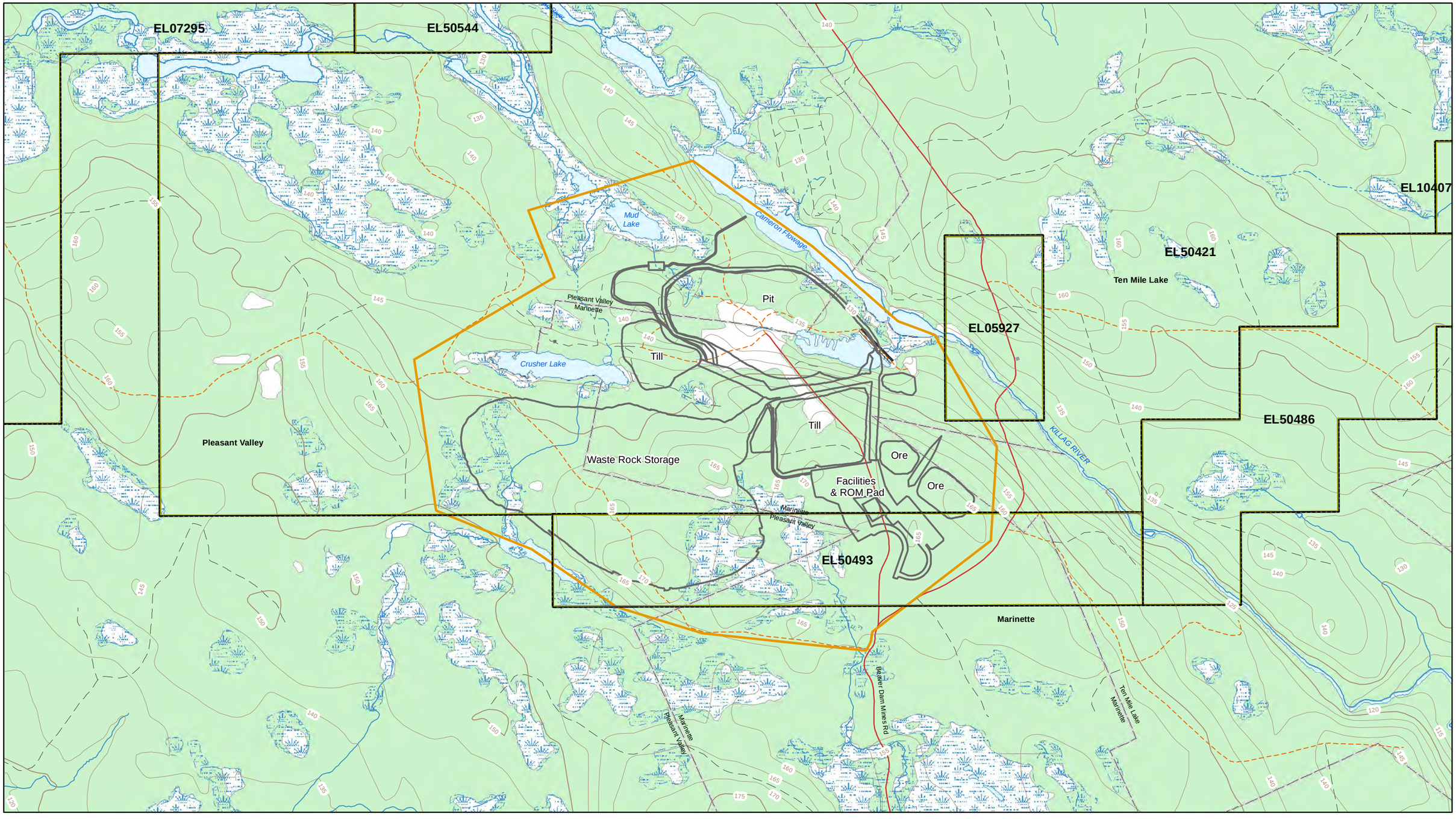
088664

Sep 28, 2015

MINE LOCATION

FIGURE 1

GIS File: I:\GIS_DATA\Projects\088xxx\088664 Atlantic BD\2015\1509Sep\088664 (001) GIS-DA001.mxd



Source: Service Nova Scotia, NS Natural Resources

0 100 200 300
Meters

Coordinate System:
NAD 1983 CSRS UTM Zone 20N

Legend

- General Mine Features (June 11 2015)
- Environmental Baseline Study Area
- Community Boundary
- Mineral Exploration License

Roads

- Local
- Dry Weather / Seasonal
- Track

ATLANTIC GOLD CORPORATION
MARINETTE, NOVA SCOTIA
BEAVER DAM MINE

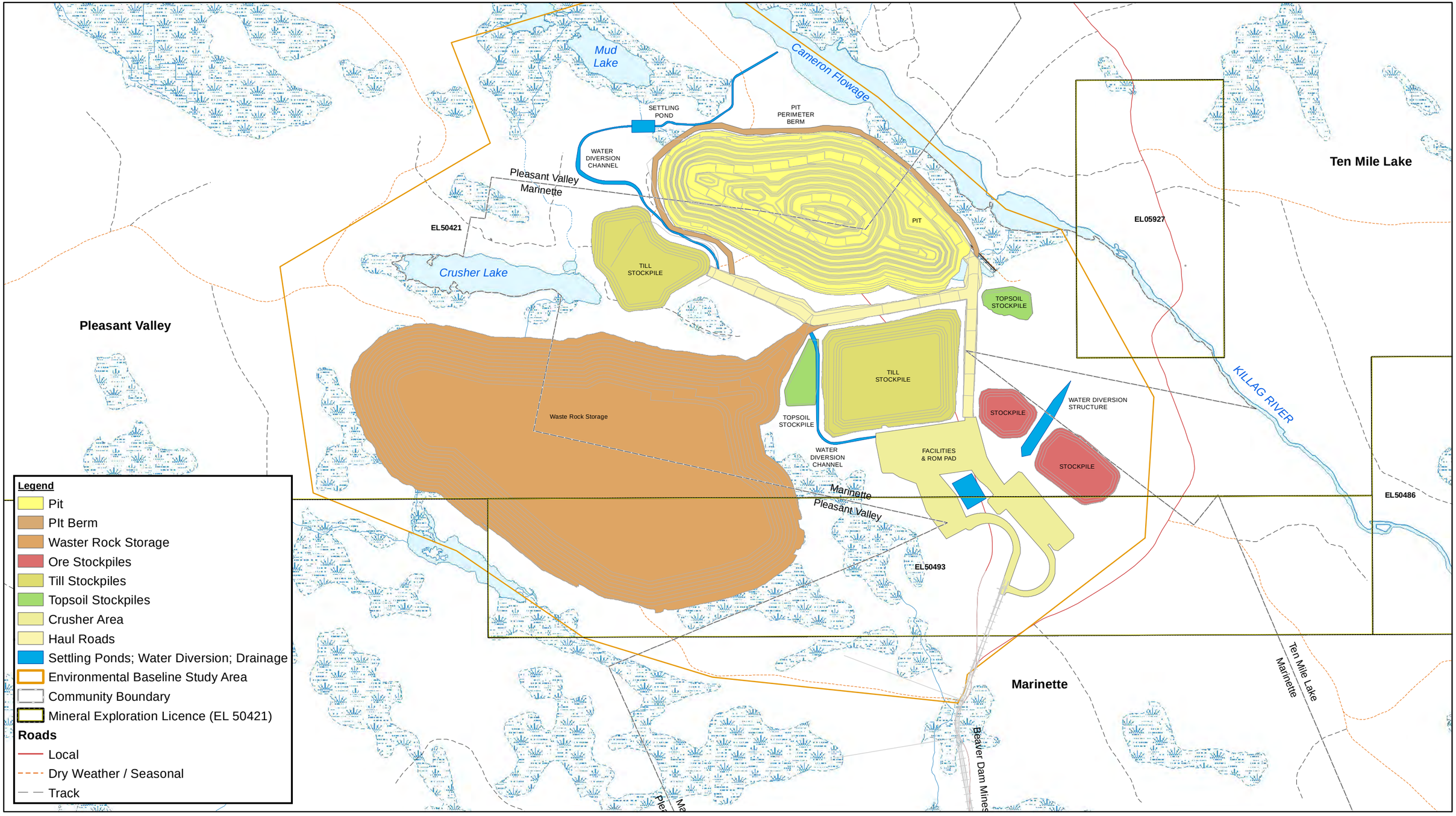
088664

Sep 28, 2015

GENERAL SITE MAP

FIGURE 2

GIS File: I:\GIS_DATA\Projects\088xxx\088664 Atlantic BD\2015\1509Sep\088664 (001) GIS-DA002.mxd



Source: Atlantic Gold, Service Nova Scotia, NS Natural Resources, NS Environment

0 100 200 300
Metres

Coordinate System:
NAD 1983 CSRS UTM Zone 20N

ATLANTIC GOLD CORPORATION
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BEAVER DAM MINE

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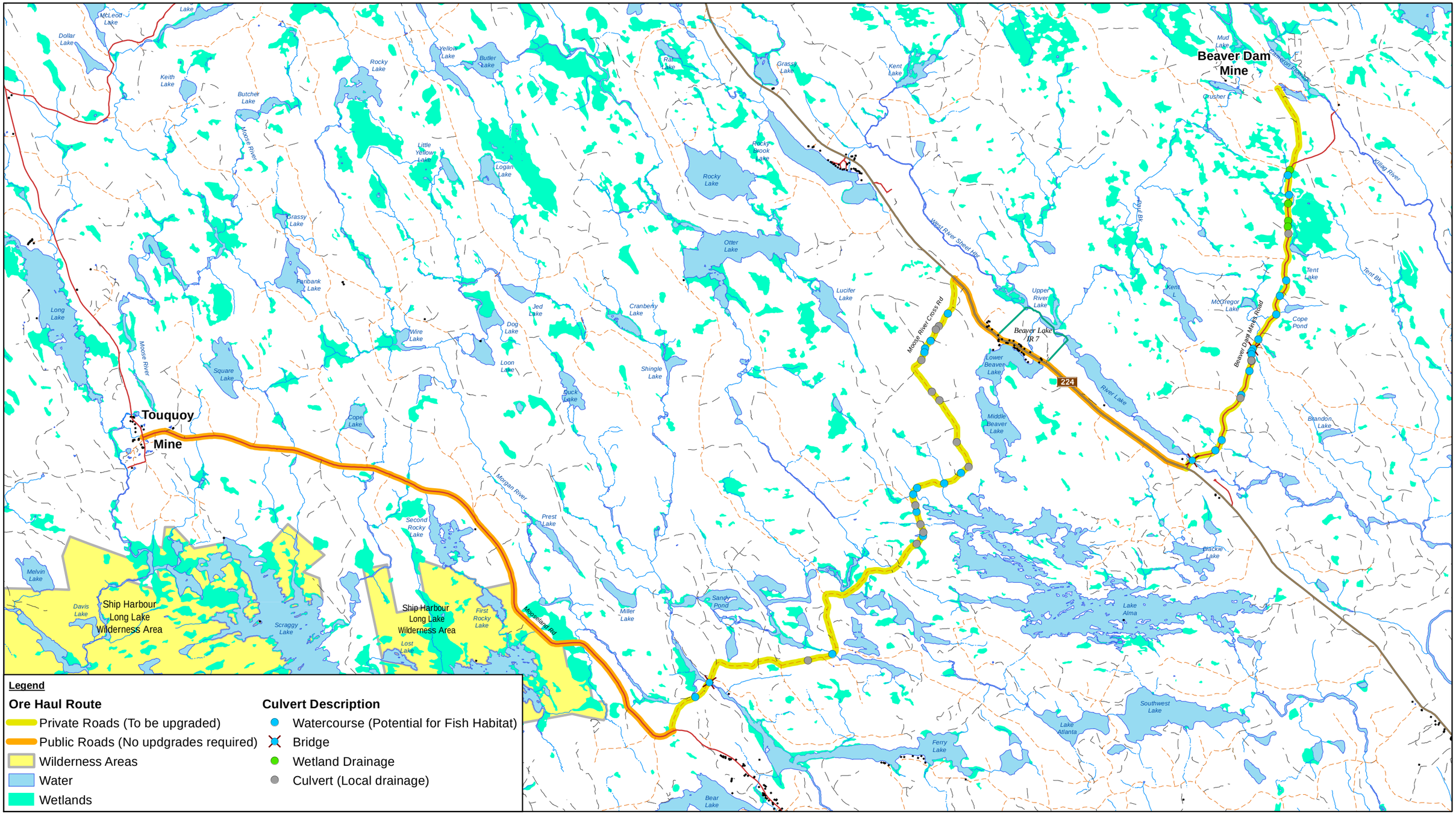
GENERAL MINE ARRANGEMENT

FIGURE 3

GIS File: I:\GIS_DATA\Projects\088xxx\088664 Atlantic BD\2015\1509Sep\088664 (001) GIS-DA003.mxd



Legend

Ore Haul Route

- Private Roads (To be upgraded)
- Public Roads (No updgrades required)
- Wilderness Areas
- Water
- Wetlands

Culvert Description

- Watercourse (Potential for Fish Habitat)
- Bridge
- Wetland Drainage
- Culvert (Local drainage)

Source: Service Nova Scotia, NS Environment, GHD (Field)

0 250 500 750 1,000
Meters

Coordinate System:
NAD 1983 CSRS UTM Zone 20N

N

GHD

ATLANTIC GOLD CORPORATION
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BEAVER DAM MINE

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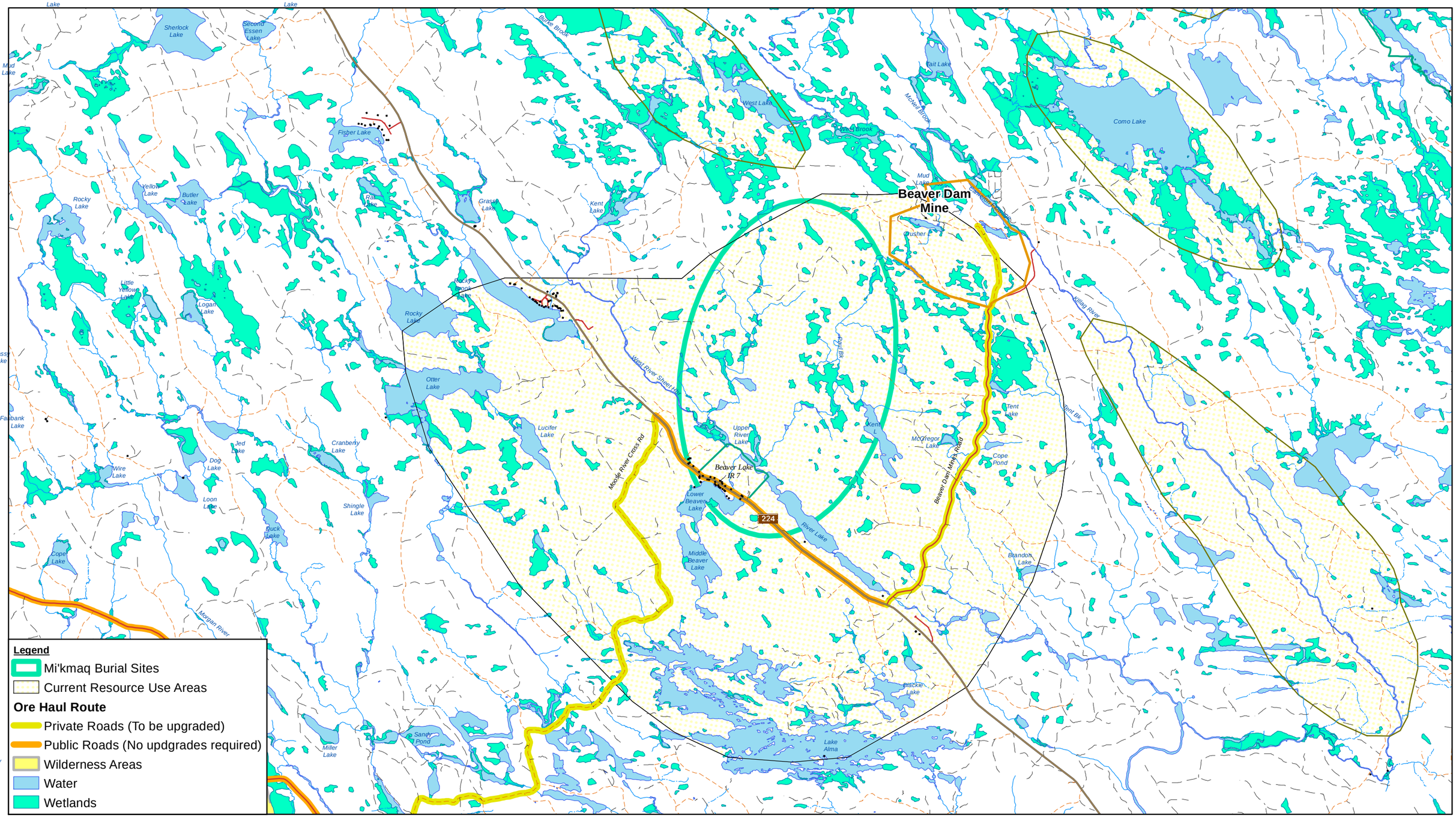
Oct 15, 2015

HAUL ROAD CONFIGURATION

FIGURE 4

GIS File: I:\GIS_DATA\Projects\088xxx\088664 Atlantic BD\2015\1509Sep\088664 (001) GIS-DA004.mxd



Source: Service Nova Scotia, NS Environment, GHD (Field)

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BEAVER DAM MINE

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MI'KMAQ CULTURAL LAND USE

FIGURE 5

GIS File: I:\GIS_DATA\Projects\088xxx\088664 Atlantic BD\2015\1509Sep\088664 (001) GIS-DA005.mxd

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