

GRAY AQUA

GROUP Ltd.

REGISTRATION OF AN UNDERTAKING

**UNDER THE ENVIRONMENTAL ASSESSMENT REGULATIONS, 2003,
SECTION 35(1)(b)**

**“SALMONIER POND ACCESS ROAD”
&
“ATLANTIC SALMON NURSERY”**

**PREPARED FOR:
GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
P. O. BOX 8700
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July 8, 2009

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NAME OF UNDERTAKING

Salmonier Pond Access Road and Atlantic Salmon Nursery

PROPONENT

- i. Name of Corporate Body: Gray Aqua Group Ltd.
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THE UNDERTAKING

- i. Nature of the Undertaking:

Class “C” access road construction and development of an Atlantic Salmon Nursery Site.
- ii. Purpose/Rationale/Need for the Undertaking:

The access road is required for logistical support of a freshwater salmon nursery in Salmonier Pond. The nursery will require road access to supply Atlantic salmon parr in the fall of each year, then employee access, fish feed and supplies. Each spring the access road will be used

to transport Atlantic salmon smolt from the nursery to the nearest “inflow” wharf in the region (likely Hermitage and soon to be constructed under a NL government infrastructure undertaking. This cost of construction and the carbon dioxide cost to the environment is offset by reducing the trucking component of smolt to parr (parr are much smaller than smolt (1/3) and will be transported at 3 times the number per truck than smolt. This will reduce the number of trucks by 53 per year hauling from NB to NL.) This savings alone at \$7000 per truck will pay for this project in its 1st year and reduce our carbon footprint indefinitely.

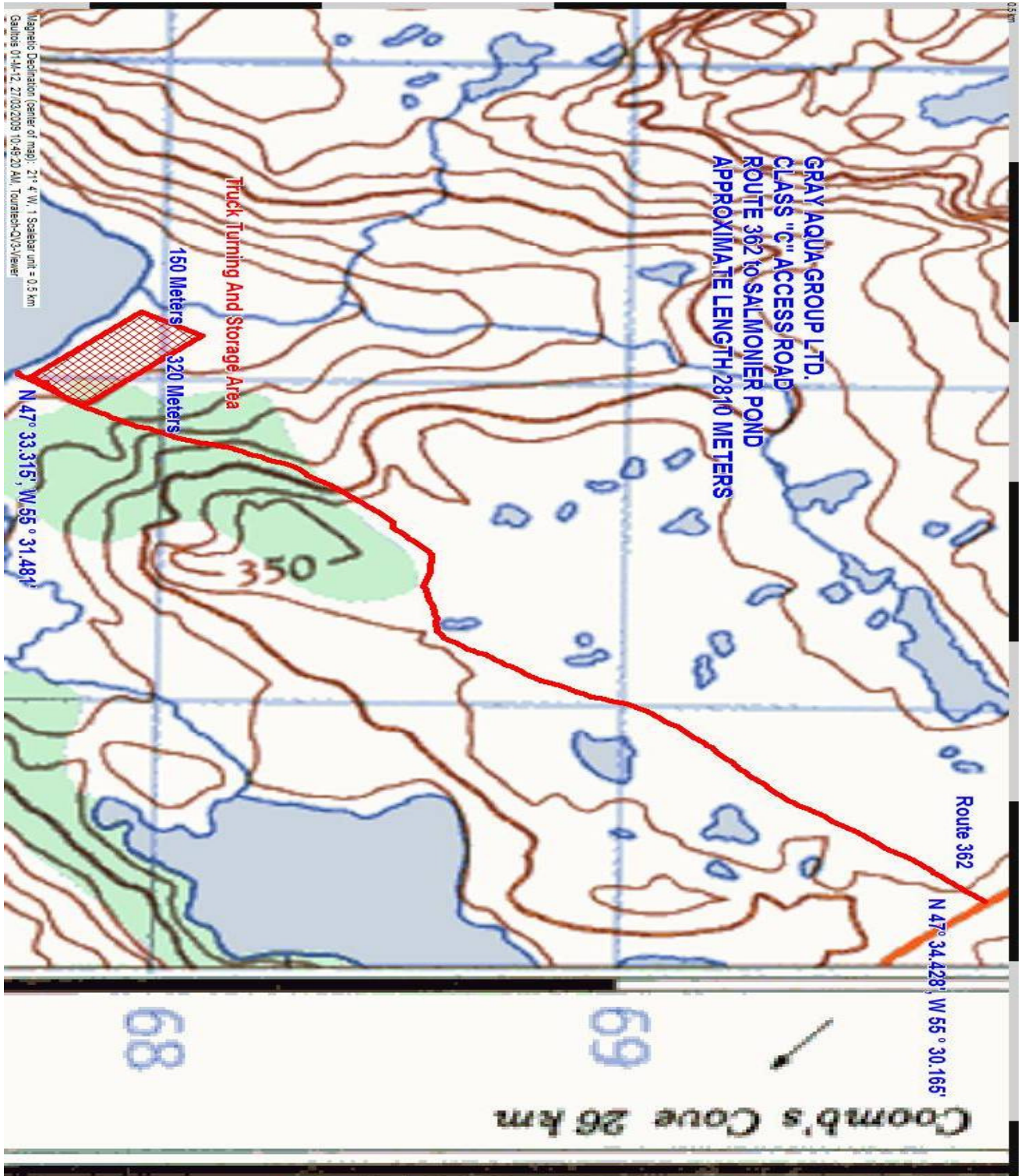
DESCRIPTION OF THE UNDERTAKING

i. Geographic Location:

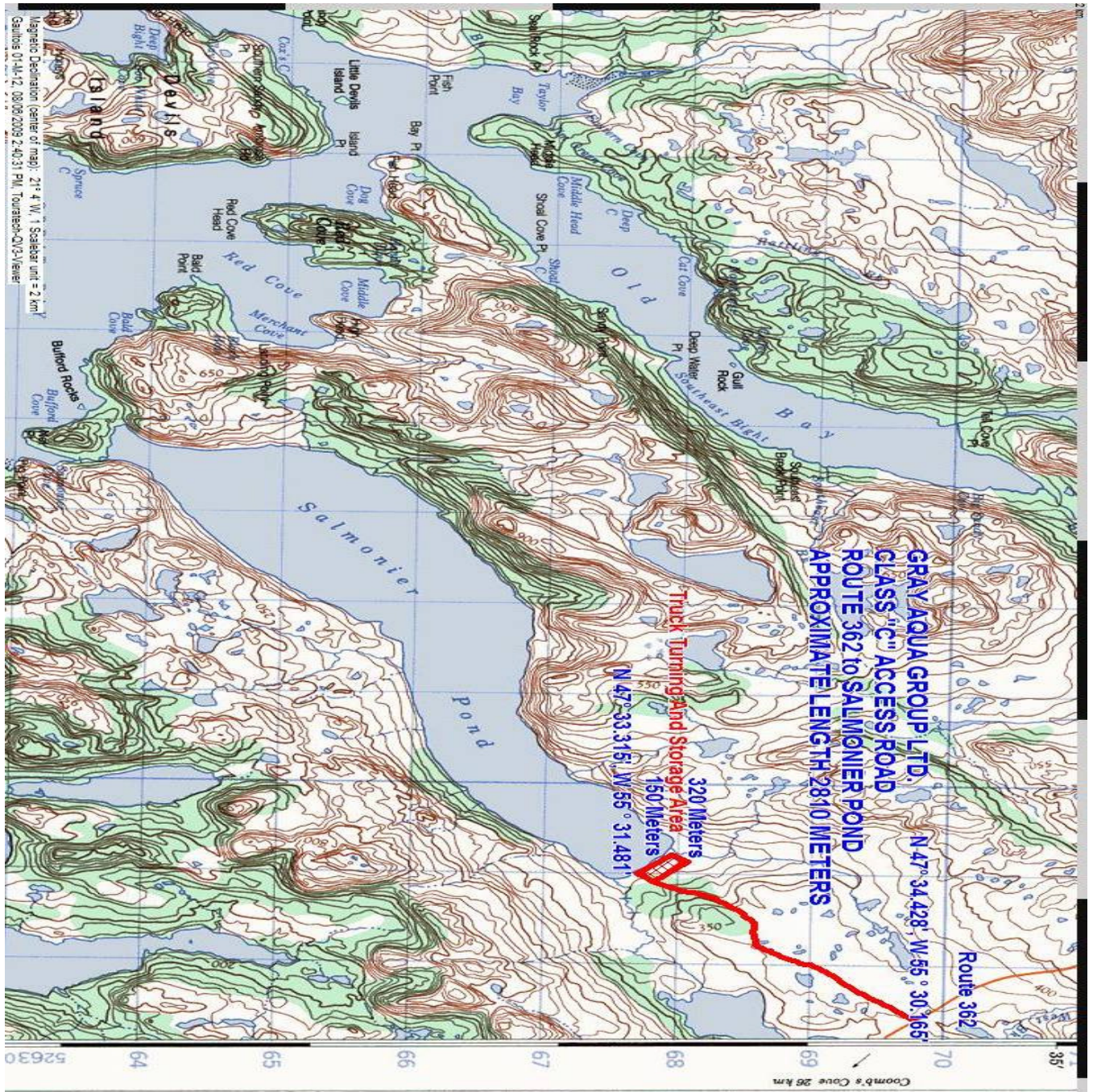
The access road will commence off Highway 362 and continue for approximately 2810 meters to Salmonier Pond. At the Salmonier Pond end of the road there is a truck turning and equipment storage area currently under application to Crown Lands. The terrain for most of the road is old granite and gravel. A few meters of wetlands will have to be crossed to permit access to the pond for trucks. There are approximately 3 rain gullies requiring normal small culverts as well as 3 small brooks approximately 1 meter across that will require culverts as well. These are too small to appear on the Gaultois topographic map 1M12. The Company’s intention is to use bottomless culverts and to not disturb the brook beds in any manner.

The Atlantic salmon nursery will consist of two sites (Site 1 and Site 2 on attached drawings and maps). Site one will be used from October to June beginning each odd year and Site two beginning each even year. This rotation will allow for fallowing of the bottom sediments below each site and prevent a Harmful Alteration Disturbance or Destruction of fish habitat under the federal Department of Fisheries and Ocean’s “Fisheries Act”. Each site will be approximately 500M by 400M and marked according to the provincial “Aquaculture Act” and according to exemptions from the federal “Navigable Waters Protection Act”. Each site will maintain a minimum distance from the shoreline of 40M to allow free and clear access to the shoreline by the general public. Site 1 is currently undergoing a formal assessment through

the Department of Fisheries and Aquaculture's "One-Stop-Shop" application process. This process is part of a Memorandum of Understanding with the Department of Fisheries and Oceans and includes all relevant provincial and federal agencies. Site 2 is currently under assessment in preparation for an application this year by this proponent.



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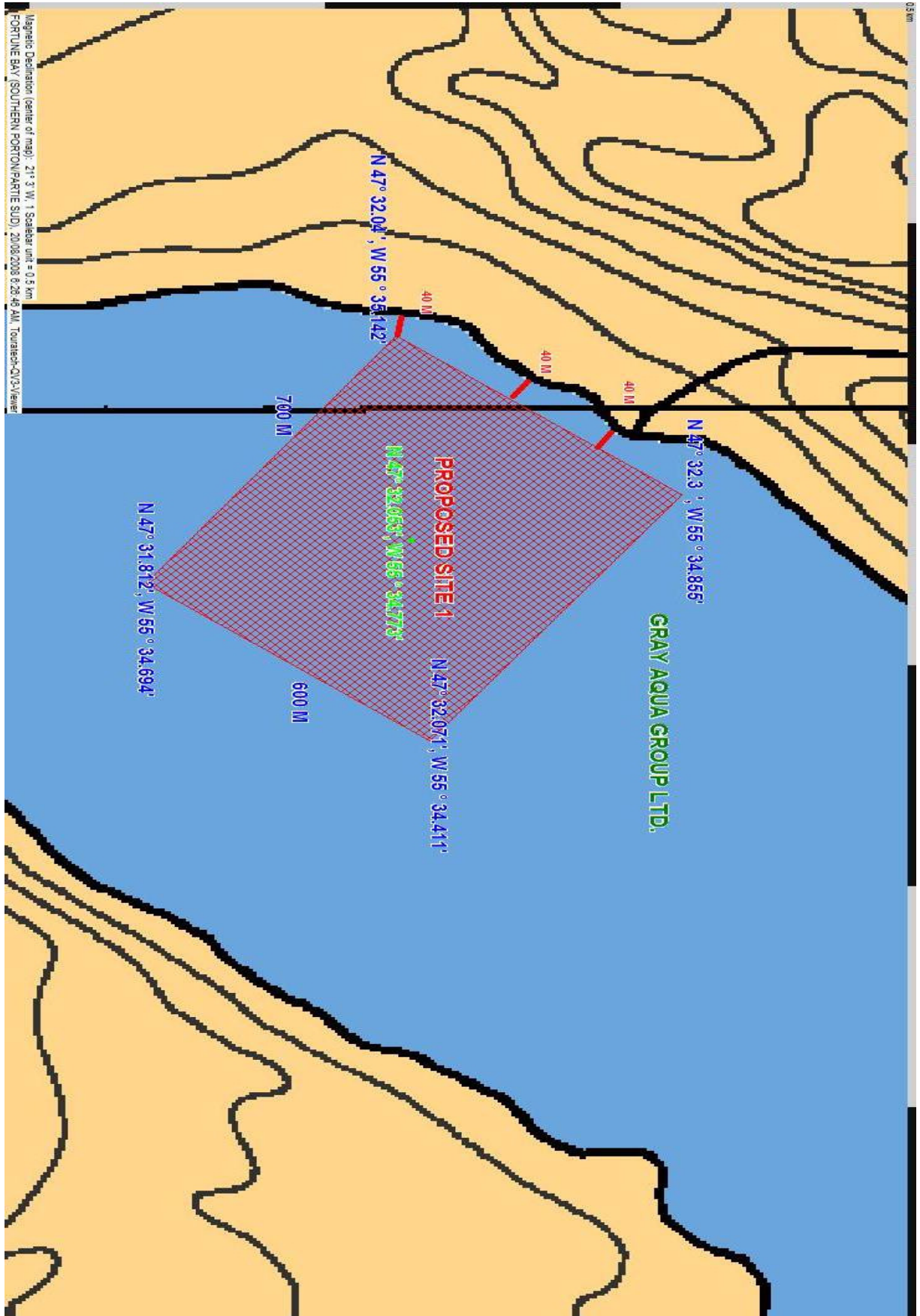
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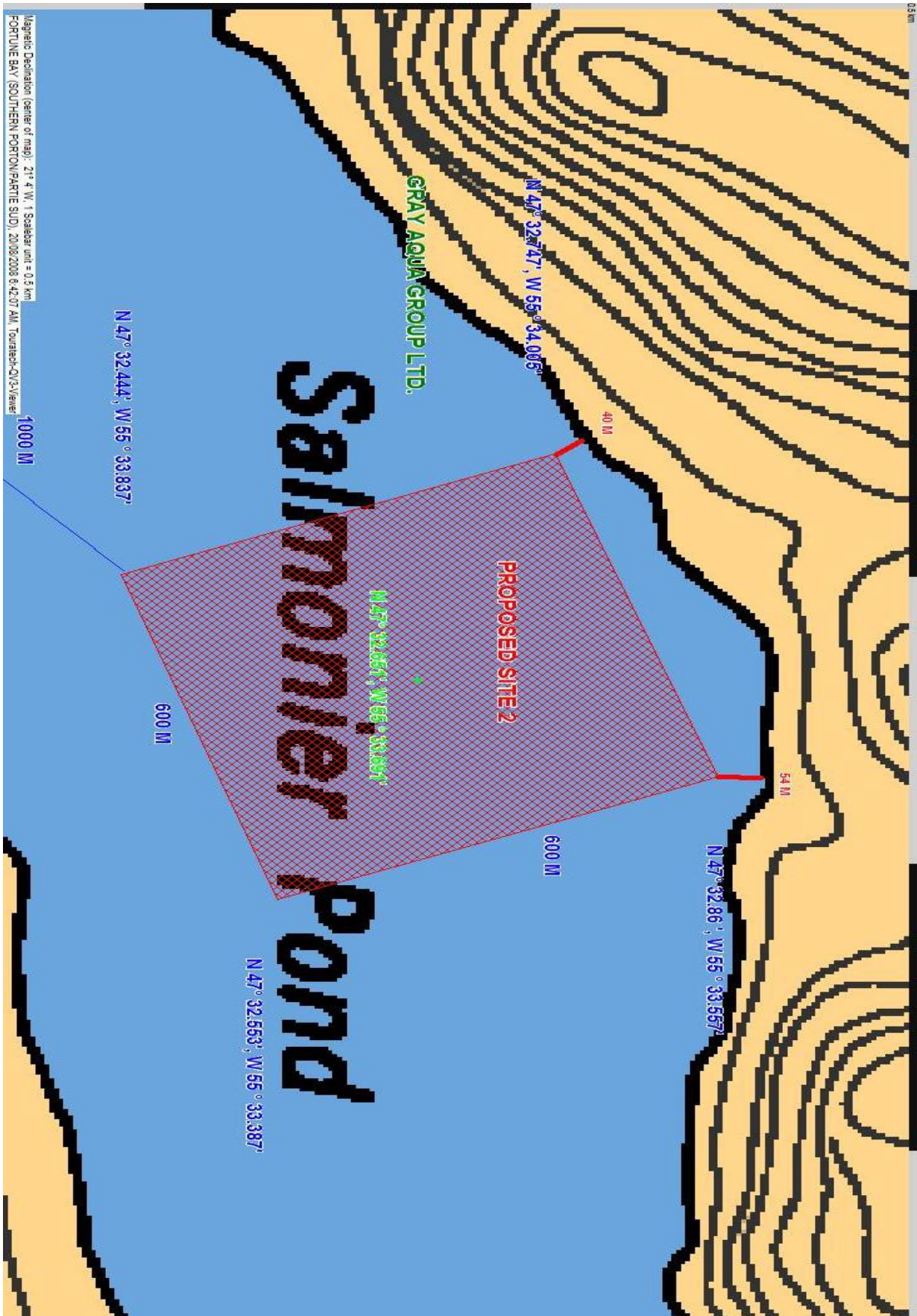
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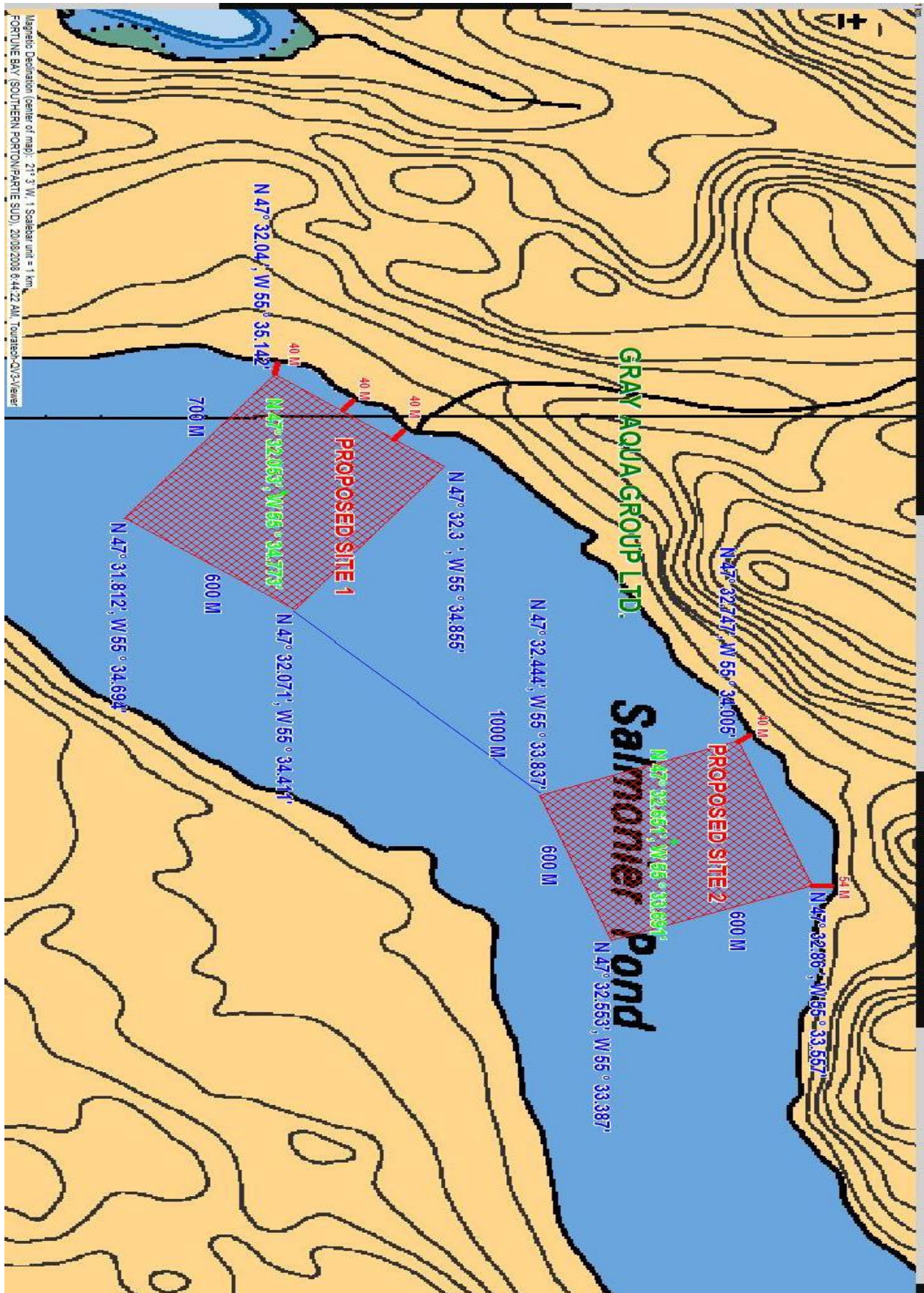
WORLD OF MAPS
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48°W	52°W	56°W	60°W
11 M8	1 M13	1 M18	1 M23
11 M9	1 M12	1 M15	1 M18
11 M6	1 M5	1 M4	1 M3







ii. Physical Features:

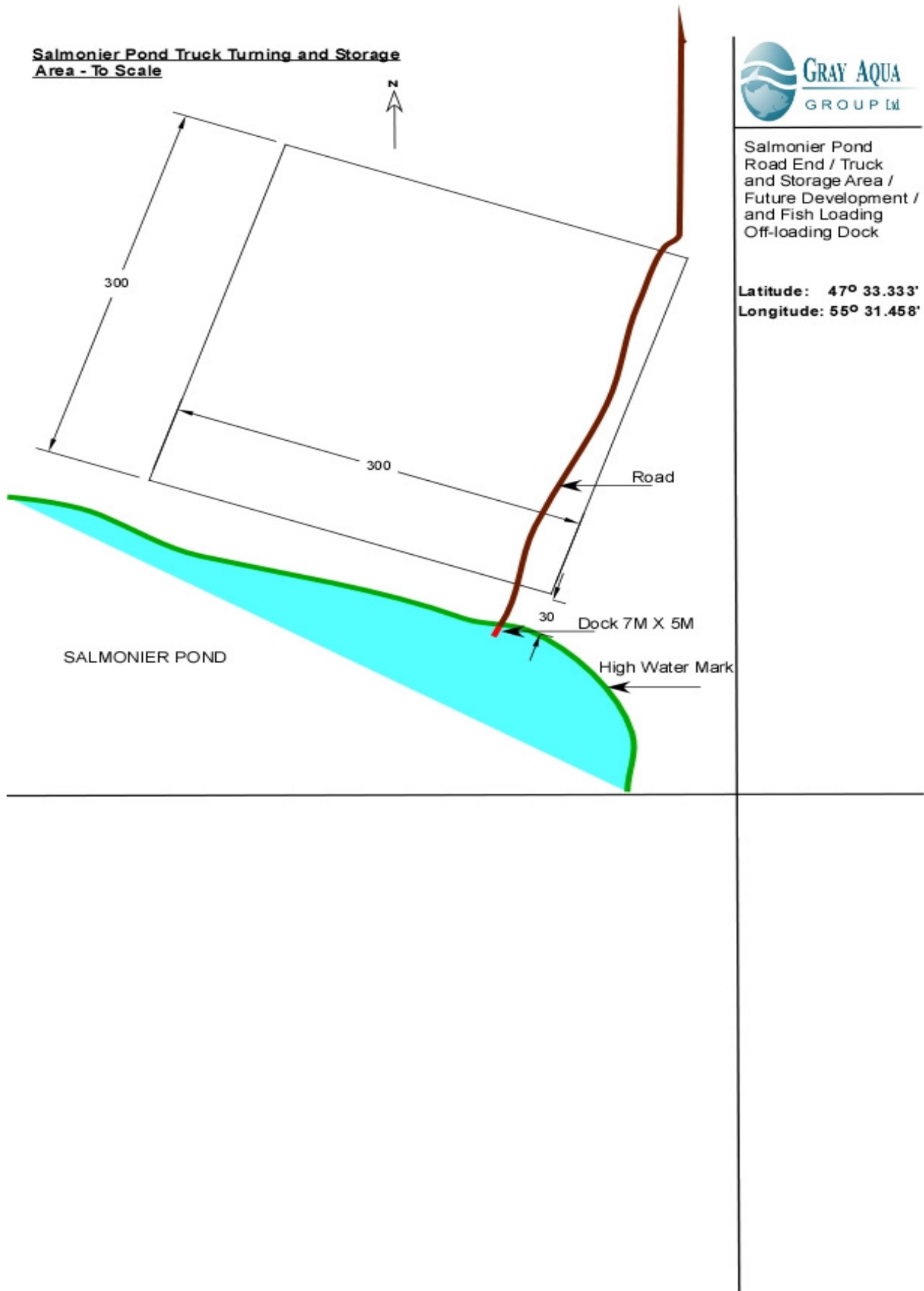
Major features of the undertaking: At the start of the road there is a transmission line approximately 10 meters from Highway 362 that we would have to pass under and this will not present any difficulties as the vehicles we will be using will not have high structures that might touch or interfere in any manner with the transmission line. This has already been verified with Newfoundland Labrador Hydro. A permit to pass will be issued when we are ready to commence construction.

The major feature of the Atlantic salmon nursery is the sheer drainage area of the inland fjord that is Salmonier Pond. It is very deep at 100 meters and wide at 2000 meters and long at 6000 meters. The water exchange is approximately 80,000 liters per minute. The outflow is not "Scheduled" by DFO and attempts at capture of salmonids in fall 2008 indicated a very small salmonid population and free for the most part of any disease with commercial ramifications. Water chemistry indicated very poor productivity with total phosphorous below the levels of detection. Other water chemistry parameters were within tolerances for salmonids while not ideal around pH, alkalinity and hardness. This is also understandable given that the drainage area consists of a geomorphology of old granite, very little vegetative cover, practically no forest in over the whole watershed.

Area to be affected by the undertaking: The road is approximately 2810 meters long and approximate 5 meters wide for an area of 14,050 square meters. The trunk turning area and equipment storage will be approximately 120 meters by 150 meters for 18,000 square meters. The total area of the undertaking is 32,050 square meters. The truck turning area will be a minimum of 30 meters from the shoreline of the lakes high water mark.

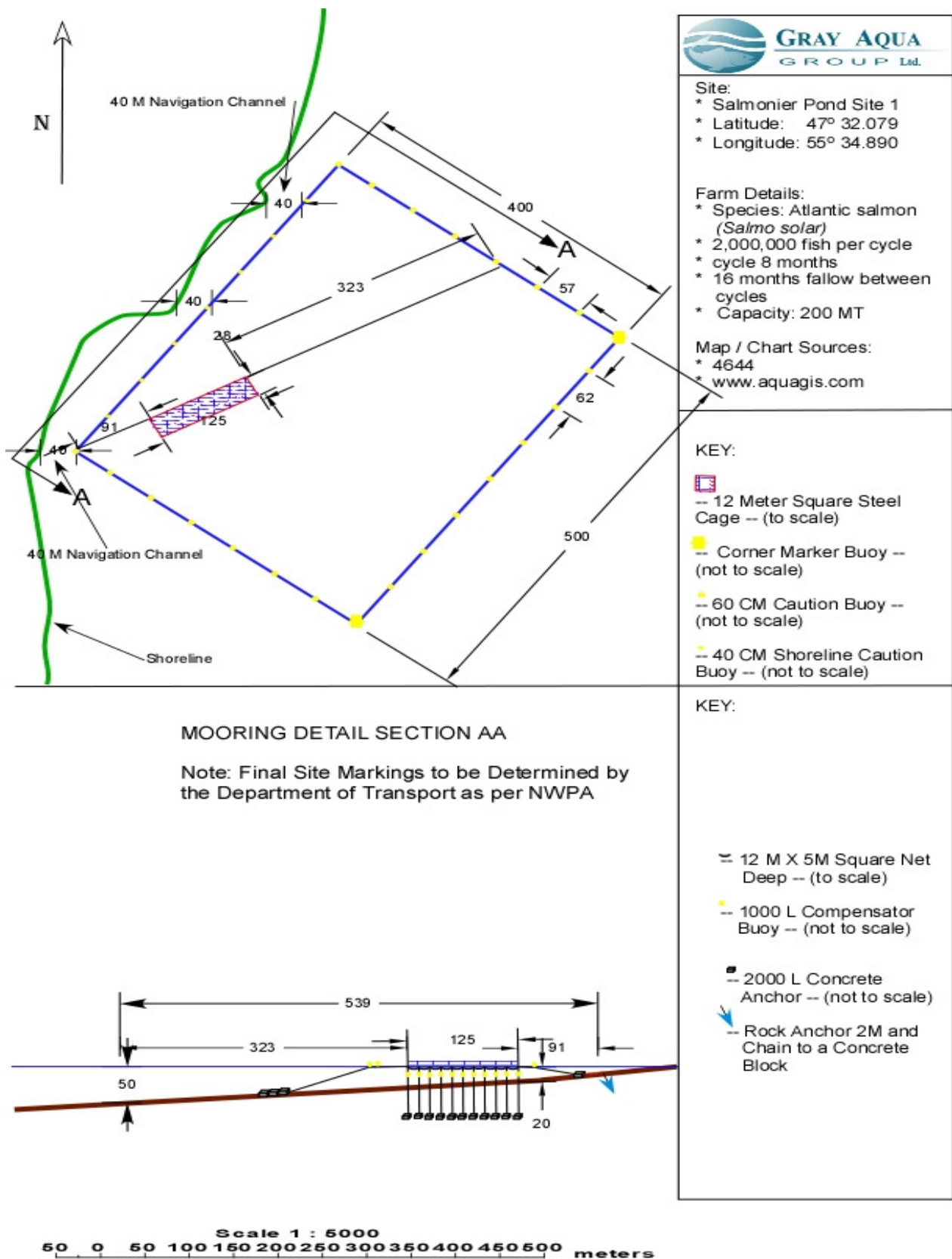
The area of the Atlantic Salmon nursery is 20 hectares for Site 1 and 20 hectares for Site 2.

Artist's conceptual drawing: The conceptual drawing for the truck turning area is as follows:



ENVIRONMENTAL REGISTRATION APPLICATION

Conceptual drawings of the nursery Site 1 are as follows:



A description of the physical and biological environments within the areas potentially affected by the project: The geomorphology of the area is old pink granite. The valley through which the road will traverse is a glacial one. Salmonier Pond is an inland fjord. The granite in the valley is old and crumbling with lots of gravel and stone on the route of the road. It is not anticipated that a gravel pit will be required for this reason. The Company may have to access existing local gravel pits to build access across the first 2 brooks. We are thinking that we will need to build towards the brooks without crossing them and put in the bottomless culverts and then fill in around them before crossing over. The granite is harder for approximately 500 meters closest to Route 362 and options for fill material on the proposed route are poorer than the rest of the route. Once the 2 brooks are traversed the route provides its own fill. There are 3 of these brooks along the route and the Company has noted that there might be fish fry using these brooks and the Company is very sensitive to not disturbing fish habitat. The overburden throughout the route is about 15 cm of grasses and tundra. The route will traverse along the edge of a patch of forest on its right side on the route from Highway 362 and Salmonier Pond – the route of the road will not disturb this patch of forest. Very close to the edge of Salmonier Pond is a deep wetland. We intend to disturb as little of the wetland by staying to the narrowest edge on its left hand side going from the Highway 362 towards Salmonier Pond. The following pictures are typical of the terrain.





iii. Construction:

The approximate construction period: 1 month for the road and a month each for Site 1 and Site 2..

The proposed date of first physical construction related activity would be: immediately after this process. This is expected to be just before July 31st, 2009, with construction starting August 1st, 2009. The construction of Site 1 will be September 1st, 2009 to September 30th, 2009.

Potential sources of pollutants during the construction period: There is some potential that the construction equipment could encounter fuel and or gear oil spillage. Federal guidelines for fuel storage and handling will be followed. Equipment used during construction will be visually inspected daily before starting work to monitor for minor leaks. All minor leaks will be attended to immediately and the offended area cleaned. A spill kit will be on hand to absorb minor spillages. The equipment will use diesel and will release carbon dioxide into the atmosphere. The Company anticipates that road construction will require an excavator, a tractor, and a dump truck. There is no soil, so erosion due to rain runoff is not a factor. There will be human waste that will be managed with a portable outhouse and a chemical toilet. These human wastes will be disposed of at a municipal treatment facility in Conne River – (“municipal waste treatment lagoon”.) The construction will be easier than most locations in that there is adequate fill along the route of the undertaking to satisfy the needs of construction.

Potential causes of resource conflicts: All the gravel pits in the area are used by campers and they may be disturbed by the noise of the equipment. Along the route of the proposed undertaking there are no other resource users.

iv. Operation:

Description of the operation: The operation will be typical “class C” road with use from fall to spring each year. This road will be used to supply and service Site 1 and Site 2 of the Atlantic salmon nursery. The Atlantic salmon nursery will operate from October to June of each

year growing vaccinated Atlantic salmon parr from 30 grams and metamorphing into Atlantic salmon smolt ready for sea at approximately 75 grams to 100 grams.

Estimated period of operation: The access road will be used by nursery operations from fall to spring each year.

Potential sources of pollutants during the operation period: There is some potential that the transfer trucks and the employee work vehicle could encounter a fuel and or gear oil spillage. A spill kit will be on hand to absorb minor spillages. The trucks will use gasoline and diesel and will release carbon dioxide into the atmosphere. There will be human waste with this operation that will be managed with a portable outhouse and a chemical toilet. These human wastes will be disposed of at a municipal treatment facility in Conne River – (“municipal waste treatment lagoon”.)

During the operation of the Atlantic salmon nursery there are various potential sources of pollution. There will be a diesel generator on site for electrical purposes and a service boat using hydrocarbons. A spill kit will be on hand to absorb minor spillages. These operations will release carbon dioxide into the atmosphere but these are offset by reduced trucking costs of smolt from New Brunswick versus parr. There will be human waste with this operation that will be managed with a portable outhouse and a chemical toilet. These human wastes will be disposed of at a municipal treatment facility in Conne River – (“municipal waste treatment lagoon”.) The fish will be fed a fry feed with a source of total phosphorous with potential that some percentage will not be eaten by the fish. Also as the fish consume the feed some of the phosphorous will pass through the fish as feces and as dissolved nutrients from the gills. The enrichment from this operation is mitigated by the sheer volume of receiving waters and the freshwater turnover of the system. This operation will not cause this watershed to change trophic levels. The accumulation of feces below the cages has the potential to cause a HADD. This will be mitigated by a 16 month fallow period between sites as well as Phase 1 and 2 monitoring for DFO of sediment deposition and in particular background levels of sulphides and the redox potential of the sediment. Sediments conditions are not to anoxic at 2500 micro-molars of sulphides or beyond 25% of the original baseline measured sulfide levels. With cage aquaculture there is the potential to have

escapes of farmed Atlantic salmon into the environment and to have those farmed escapees interact with their wild counterparts. This risk potential is minimized in this case by choosing a site with very low productivity, minimal salmonid habitat, depth such that winter ice does not form, little forestation and thus floating debris, and the site will be operated under the federal provincial Code of Containment.

Potential sources of resource conflicts with the operation: There are no potential resource conflicts identified with this particular operation i.e. the access road. The access road is an undertaking in facilitation of an aquaculture development, namely, a nursery in Salmonier Pond. The nursery undertaking does have some resource user conflict identified. There is one cottage owner on the lake and he is opposed to the nursery project. He uses the lake for recreational purposes and anticipates that our operations will interfere with his usage. The Company's view is that there is adequate space for all users. This is being addressed in a different forum – the aquaculture application process.

v. Occupations:

Estimated number of employees for construction and operation of the project as well as the expected duration of employment: During construction we estimate that there will be 3 heavy equipment operators contracted in for 1 month. During continued operation of this undertaking and the undertaking that it supports, the nursery, 3 seasonally permanent jobs in NL will be created from fall to spring. In NB the hatchery that will supply the nursery that will have approximately 3 full time workers from November to October each year producing parr from eggs. As well 10 vaccinators will receive 1 month of work each year in NB vaccinating parr for the nursery. These fish will further be used in marine operation in NL to produce 10,000 MT of salmon. This will generate 150 jobs in farming and processing. These job estimates at the nursery and during operations are already accounted for in the application for the nursery site and the supporting marine sites.

Enumeration and breakdown of occupations: This particular undertaking will hire by contract 3 heavy equipment operators. A surveyor will be contracted. One of the Company owners is an engineer by profession and will provide technical assistance and overall project control. This construction is anticipated to take one month to complete. Additional general labour will be taken from the Companies regular staff as required.

The operation of the Atlantic salmon nursery will entail 3 aquaculture technician positions.

Delineation of work carried out by direct hiring and / or contracting out: The heavy equipment operators will be contracted and the surveyor as well. The engineer and any general labour will be provided for in house. The aquaculture technicians will be provided for in house.

Employment equity: The Company has an equal opportunity hiring policy and does not hire relative to age, gender, race or sexual orientation.

vi. Project related documents:

The Company has not ever carried out a formal Environmental Assessment. It has however prepared applications with information for environmental screening to determine if an Environmental Assessment is required. None to date have required an Environmental Assessment. There are 7 marine site applications for Finfish Aquaculture at Butter Cove, Jervis Island, Goblin Bay, Pass-My-Can, Stone Island, Cul de Sac, Stanley Cove. The first 4 are licensed and the last 3 are still in review. There is one freshwater nursery application that is in review (Site 1) and a second (Site 2) under site hold agreement with DFA until the assessment by the proponent can be completed. There is a business plan and a marketing plan in support of all these undertakings.

APPROVAL OF THE UNDERTAKING

The Aquaculture License, Navigable Water Protection Act exemption, Water Use Authorization and Permit to Occupy and/or Crown Land Lease are all pending for Site 1 of the nursery undertaking. With regard to the access road part of application we anticipate that we will need a Crown Lands approval for a Permit to Occupy then followed by a survey, and then issuance of a Crown Lands lease. DFO's Habitat Division and the Water Use Division may need to be consulted on crossing the small brooks and the culverts involved.

SCHEDULE

If the project is to move ahead in 2009, then we would need to start construction with this undertaking in August and at the latest September. These dates are important to us because we need to get the salmon parr to the lake in October to meet biological schedules of the fish. The Atlantic salmon nursery will operate from October to June each year.

FUNDING

This particular undertaking is not dependent upon government funding and is paid for with savings in trucking costs on smolt versus parr from NB to NL. The capital costs of this undertaking are estimated at \$100,000 (low because of the fill material on the route, no forest and very little wetlands). The savings that the Company will partake of yearly on trucking alone will be approximately \$370,000 at full capacity.

Date: July 6th, 2009

Signature of Chief Executive Officer: _____

