CONSORTIUM

NORDA STELO Stantec

1032, 3e avenue, Val d'Or, QC, J9P 1T6

Ref. No. : 115726.006-600-603

REPORT

SOCIÉTÉ DE DÉVELOPPEMENT DE LA BAIE-JAMES

Application for exemption from the environmental assessment procedure under section 154 of the Environment Quality Act

Operation of a new quarry and a mobile bituminous concrete plant located at km 305 of James Bay Road

Presented to the Ministère de l'Environnement et de la Lutte contre les changements climatiques

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Québec

CONSORTIUM

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Operation of a new quarry and a mobile bituminous concrete plant located at km 305 of James Bay Road

Application for exemption from the environmental assessment procedure under section 154 of the Environment Quality Act

Ref. No: 115726.006-600-603

Prepared by:

Anne-Marie Leclerc, M.Sc. Geomorphologist
Project Officer, Environment

Approved by:

Vital Boulé, M.Sc., Biologist
Project Lead, Environment

November 2019

The following sections present all the information required in the form *Renseignements préliminaires pour la réalisation d'un projet en milieu nordique* (Preliminary information to carry out a project in a northern region) relating to an application for exemption under section 154 of the Environment Quality Act (EQA).

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1 APPLICANT'S IDENTIFICATION AND CONTACT INFORMATION

1.1 Promoter's identification

Name:	Société de développement de la Baie-James (SDBJ)
Civic address:	110 Boulevard Matagami P.O. 970
	Matagami, Québec J0Y 2A0
Postal address (if different):	
Phone:	819-739-4717
Fax:	819-739-4329
E-mail:	etagho@sdbj.gouv.qc.ca
Project Officer:	Émil Tagho, Eng., MBA Project Director, Société de développement de la Baie-James
Mandatory: Québec Enterprise Number (NEQ) from the Québec Enterprise Register	Not applicable

No resolution of the municipal council is attached to this application.

1.4 Identification of the Consultant Mandated by the Promoter

Name:	Consortium Norda Stelo/Stantec
Civic address:	1032, 3e Avenue Ouest Val-d'Or QC, Canada J9P 1T6
Postal address (if different):	
Phone:	514-393-9110, ext. 40215
E-mail:	anne-marie.leclerc@norda.com
Project Officer:	Anne-Marie Leclerc, M. Sc., Geomorphologist
Mandatory: Québec Enterprise Number (NEQ) from the Québec Enterprise Register	3373097636

Description of the Mandate

The repair work on James Bay Road is programmed in two (2) phases: the phase from 2014 to 2017 and the phase from 2018 to 2021.

In September 2017, the Norda Stelo/Stantec Consortium received the mandate from SDBJ to prepare the plans and specifications for the 2018 to 2021 program and to carry out other related mandates. The related mandates mainly include the preparation and presentation of applications for authorization, leases and permits with various regulatory authorities concerned (MELCC, MFFP, MPO, MERN).

The objective of this application is to obtain a notice of exemption under section 154 of the *Environment Quality Act* (EQA) for the following activity:

- Operation of a projected new quarry, with an area of less than 3 ha to be uncovered, situated at km 305 of James Bay Road;
- Operation of a mobile bituminous concrete plant near the quarry at km 305 of James Bay Road.

2 PROJECT LOCATION AND SCHEDULE

2.1 Identification and Location of the Project and its Activities

The projected quarry is situated at kilometre 305 of James Bay Road, in MRC de la Jamésie (991), in the territory of the Eeyou Istchee James Bay Regional Government (1516), in the Harricana-Nord management unit (106) and in the Nord-du-Québec administrative region (10).

The approximate central geographic and planimetric coordinates of the projected quarry are as follows:

LAT/LONG (degrees, min, sec.)	UTM zone 18 (NAD83)
51°43'10.38" N; 77°23'3.37" O	335,288 m E; 5,732,529 m N

According to the James Bay and Northern Quebec Agreement, the quarry at 305 km is located on Category III lands, i.e., a free public territory with no exclusive usage by Indigenous communities. The development and operation of the quarry will have no impact on neighbouring community hunting and fishing rights.

2.2 Description of the Site Covered by the Project

Biophysical Environment

Regional Context

The projected site of the quarry is part of the spruce-moss bioclimatic domain. This domain is contained in the Abitibi Lowlands Natural Province and covers an area of 74,841 km². The Abitibi Lowland Natural Province is a plain slightly inclined in the direction of James Bay with an altitude descending from south to north. The climate of the Lowland is moderately cold and humid in the south, with a long growing season. To the north, it is cold and humid with an average growing season.

Due to the regional bioclimatic conditions and the gentle terrain, the vegetation is generally undiversified, with high proportions of softwood stands (Blouin and Berger, 2004). The plant cover is characterized by a predominance of black spruce and jack pine. The back spruce stands are often found in poorly drained soil or in depressions and grow on surface deposits of both organic and mineral origin. Black spruce forests are usually covered with a carpet of mosses, ericaceae or sphagnum, depending on the topographic position, the soil type and the drainage of the stand.

Among the hardwood stands potentially present, white birch and trembling aspen are the most frequent. Birches are mainly found on hills and hillsides with long regular slopes, while trembling aspens mainly occupy clay soil and are found on flat sites located at the base of the slope.

The projected quarry is found in the Pontax River watershed, with an area of 7,854 km². The river flows approximately 3 km north of the projected quarry. No watercourse crosses the quarry site. The closest permanent watercourse is a nameless watercourse identified over 300 m southwest of the projected operating area.

No protected area legally identified in the register of protected areas is present in the study area or within a radius of 3 km from the projected quarry.

Local Context

A field survey conducted on September 5, 2019 validated the initial delimitation of the natural environment done by photo-interpretation and refined them. The location of the ecological validation stations of interest (wetland outside the limits = S1, operating area = S2 and extraction area = S3) is presented in Map A1.1 in Appendix 1.

The proposed extraction area is found on a rocky hill where sparse vegetation grows (photos 1 and 2). At station S3, there is no soil consolidated on the rock, which is mostly exposed. Several taxa of lichens and mosses form the muscinal stratum. The herbaceous stratum is composed essentially of ericacea, such as the lowbush blueberry (*Vaccinium angustifolium*). The arborescent stratum is essentially composed of black spruce (*Picea mariana*) and jack pine (*Pinus banksiana*), and shrub regeneration is almost absent.

The proposed operating area is occupied by a pine forest resting on a forest mineral soil of sandy loam (photo 3). At station S2, the soil consists of a fine layer of organic litter (< 5 cm), where leaching areas (grey) and enrichment areas (reddish brown) are distinguished before reaching the till (brown). The vegetation consists of the same species of the arborescent stratum as in the projected extraction area, with jack pine as the dominant species and black spruce as the codominant species. In the shrubby stratum, species of willow (*Salix sp.*) and black spruce are observed in regeneration. Finally, in the herbaceous stratum, the lowbush blueberry is dominant.

Two (2) wetland complexes are present north and south of the proposed access road. The one on the north is identifiable by photo-interpretation as an ombotrophic bog with bog-pool systems. The one on the south is identified on the map available online from the Projet d'inventaire écoforestier du Québec nordique (PIEN - Northern Québec ecoforest inventory project) of the MFFP as a “spruce/sphagnum forest on organic deposit”, and thus possibly a swamp or a wooded bog. The field survey at station S1 allowed validation that the station was a shrubby swamp (photo 4). At station S1, the soil presents a little less than 20 cm of fibrous organic materials, followed by clay loam mineral soil. The dominant species is alder (*Alnus sp.*), with the presence of trembling aspen (*Populus tremuloides*) and willow. The herbaceous stratum consists of lowbush blueberry, Labrador tea (*Rhododendron groenlandicum*),

bunchberry (*Cornus canadensis*) and horsetails (*Equisetum sp.*). The projected site for the mobile bituminous concrete plant avoids these wetlands.

Finally, the photo-interpretation identified the presence of low points, which are preferred natural drainage paths from the rocky hill northwest of the projected quarry. Having said this, the available satellite images did not allow a clear ruling on the presence of a surface flow representing a watercourse. The field surveys also did not confirm the presence or absence of a stream bed. As a precautionary measure, all the low points visible by photo-interpretation were characterized as “probable intermittent watercourses” in Map A1.1 and thus were avoided within the proposed limits of the quarry. A distance of 30 m was respected, even though section 15 of the new *Regulation respecting sand pits and quarries* imposes this limit for steady-flow, non-intermittent watercourses.

Photo 1 **Rocky hill in the proposed extraction area**

Photo 2 **Rocky hill in the proposed extraction area**

Photo 3 **Pine forest soil in the proposed operating area**

Photo 4 **Wetland (south of the proposed access road)**

No floristic or faunal invasive exotic species (IES) was observed during the site visit. Similarly, no mention of IES is reported on the MELCC *Sentinelle* platform.

Concerning species with status, a request was sent on October 21, 2019 to the Centre de données sur le patrimoine naturel du Québec (CDPNQ) to find out the occurrence of floristic and faunal species that are threatened, vulnerable or likely to be so designated in the project study area. At the time this application for exemption was filed, the CDPNQ's answer for flora still has not been received. This answer will be forwarded to you upon receipt.

Concerning fauna, in an email dated October 23, 2019, the CDPNQ indicates there is no mention of faunal species that are threatened, vulnerable or likely to be so designated on or near the projected site of the quarry (Appendix 2). In another correspondence dating from August 14, 2019, the MFFP mentions the absence of constraints related to the presence of wildlife corridors used by the woodland caribou, and the absence of any other faunal element that may represent a constraint to operation of the quarry (Appendix 2). Thus, no specific mitigation measure in relation to the woodland caribou is to be anticipated. However, the MFFP requests that it be sent any opportunistic observation of caribou near the work site.

Human Environment

The road is used twelve months a year and serves for mobility of persons (traditional users of the territory and vacationers), as well as for transportation of resources, equipment and merchandise related to the forest and mining industries and Hydro-Québec facilities.

According to the open data of the Ministère de l'Énergie et des Ressources naturelles (MERN) on the GESTIM platform, active claims exist up to February 2020 (Nos. CDC2512264 and CDC2512265), held by Midland Exploration Inc., which cover a portion of the extraction area and the projected operating area. For information, an exclusive lease (EXL) application for mining of surface mineral substance was submitted by the SDBJ on November 6, 2019 to the MERN to secure access to the resource after February 2020.

According to the available information, the projected quarry is located on the trapline bearing number R09, for which the tallyman is James Jonah Sr., of the community of Waskaganish[1]. No Cree camp is found near the site. However, a camp is present on the north shore of the Pontax River, 2.9 km north of the projected quarry.

2.3 Work Schedule

The beginning of the preparatory work, and then the production of the km 305 quarry, is scheduled for March 2020, or when the environmental authorizations will be obtained. The main activities related to operation, i.e. blasting, crushing, screening, loading and production of bituminous concrete, should continue up to October 2020 and eventually up to October 2021, if work must be performed in completion. Likewise, if all of the available resource is not used within this time period, the residual material could be exploited in 2021 and subsequent years for road maintenance, according to the needs and until depletion of the resource or the end of the MERN operating lease.

Aggregate reserves in piles could also be loaded and used for road maintenance on an ad hoc basis afterwards, until these reserves are depleted.

The quarry will be closed at the end of operation and then reclaimed gradually, until depletion of the stockpiles of materials. A reclamation plan, including reduction of exposed faces, grading of the slopes and replanting, is scheduled in the application for authorization under section 22 of the EQA, which will be submitted soon to the MELCC.

2.4 Location Plan

Map A1.1 of Appendix 1 shows the planned delimitation of the operating area of the projected quarry and the components of the natural environment.

[1] Source: Geoportal for Eeyou Istchee, URL link: https://www.creegeoportal.ca/cta/

3 GENERAL PRESENTATION OF THE PROJECT

3.1 Project Title

Operation of a new quarry and a mobile bituminous concrete plant located at km 305 of James Bay Road (North of Quebec).

3.2 Subjection

In accordance with section 154 of the EQA, any project proponent wanting to carry out a project in a northern region who is neither subject to (Schedule A of the EQA) nor specifically exempted from the environmental assessment procedure (Schedule B of the EQA) is considered to be in a “grey zone” and must first apply for a certificate of exemption to the Ministère de l'Environnement et de la Lutte contre les changements climatiques. The development of a mobile bituminous concrete plant and the operation of a quarry of less than 3 hectares are both activities located in a grey zone.

3.3 Summary Description of the Project and the Performance Variants

Comparative Analysis of the Variants

The positioning of a quarry is directly related to the location of the operable rocky resources (rock hills) and their proximity to the sites where the materials will be used. This constraint unfortunately offers little flexibility in a region like James Bay, featuring a topography of flat terrain, where loose deposits are often thick and wetlands are abundant.

In summer 2019, SDBJ proceeded with an identification and assessment exercise for potential quarry sites between km 270 and 380 of James Bay Road. The following criteria were retained for selection of the site:

- Proximity to the projected road work;
- The height of the rocky hill;
- The quality and quantity of materials available;
- The possibility of a large enough and easily developable operating area;
- The fewest possible environmental constraints (mainly watercourses and wetlands);
- Proximity to James Bay Road.

This exercise was conducted by a geomorphologist from Consortium Norda Stelo/Stantec. A total of five (5) sites presenting a potential interest were chosen. A first delimitation of the natural environments was produced thanks to interpretation of satellite images recently available on Bing Maps, analysis of the MFFP PIEN data and the Québec topographic database. A field validation station was located in each potential wetland, for a total of three (3) validation stations.

On September 5, 2019, a field visit was conducted by a geologist and a senior technician from the engineering firm GHD Consultants Ltée. The two (2) professionals proceeded with a geological survey and collection of ecological data. For each validation station previously identified by photo-interpretation, information on the vegetation present (arborescent, shrubby and herbaceous strata), on the composition of the soil (pedon dug over more than 50 cm) and the presence or absence of free surface water and hydrological indicators were collected in the field.

In light of the results of the field investigations, four (4) sites were eliminated, either for environmental or technical reasons, resulting in the final selection of the site at km 305 as a single quarry offering operable potential with a minimum of environmental constraints.

In a second stage, the fine delimitation process of the operating area was inspired by the directives of the EQA *Regulation respecting compensation for adverse effects on wetlands and bodies of water*. Thus, the first two (2) stages of the “Avoid-Minimize-Offset” sequence were considered during the design of the project, even if, in principle, no offset is required beyond the 49th parallel North. In this spirit the area to be uncovered (blasted) and the proposed operating area comply with the following three (3) criteria:

- Does not encroach on wetlands and bodies of water;
- Has the required volumes of materials;
- Presents sufficient space for efficient and safe operation of the machinery.

Summary Description of the Project

Quarry

This application for exemption concerns the operation of the quarry, for which the area to be excavated is 29,492 m² (2.94 ha), while the total area of the operating area (including the site of the mobile bituminous concrete plant) is 79,536 m^2 (7.95 ha) (Table 1 and Map A1.1 in Appendix 1), but excluding the access road. Ultimately, deforestation equivalent to the total operating area will be necessary. The quarry will be operated above the water table.

Due, on the one hand, to space constraints in the projected operating area of the quarry, and, on the other hand, to the presence of wetlands, a distinct site is currently recommended for the installation of the mobile bituminous concrete plant. It is presented in Map A1.1 and covers an area of approximately 1.6 ha.

According to the current forecasts, the total volume of the quarry, or 120,000 m³, could be operated during the first year of operation, in 2020 (from March to October). Otherwise, residual material could be exploited in 2021 or in the subsequent years, depending on the needs and up to depletion of the resources or the end of the MERN operating lease, for a 10-year term.

The sequence of projected activities on the site is as follows:

Preparatory Phase

- Delimitation of the zone to be operated by surveying, deforestation and recovery of commercial timber, if applicable;
- Development of the access road;
- Stripping and set-aside of organic soils and non-commercial woody debris within the operating area (for use during reclamation);
- Development of the zone of the operating area for crushing, screening, reserve piles and machinery parking.

Operating Phase

- Drilling and blasting for exploitation of materials in the zone to be excavated;
- Crushing, screening and piling of material reserves;
- Direct loading of materials in trucks for transport to the road repair sites or loading to the mobile plant for production of bituminous concrete, then transportation offsite.

Reclamation Phase

- Reclamation of the excavated zone and the operating face of the quarry;
- Grading of the organic soils in reserve;
- Grading of the slopes for the operating areas;
- Replanting with species adapted to the environment.

Table 1 Summary of operating areas for uncovering and deforestation of the projected quarry

Current state	
Previously operated area	None
Stripped area	None
Submits application for exemption	
Area to uncover (blasting zone)	29,492 m² (2.94 ha)
Operating area (quarry and bituminous concrete plant)	68,883 + 10,653 = 79,536 m² (7.95 ha)
Total surface to be deforested, including the access road	79,536 m² (7.95 ha)
Mean thickness	10 m
Maximum thickness	15 m
Theoretical total volume of aggregate available (loose volume)	120,000 m³

Bituminous concrete plant

The location sought for the mobile bituminous concrete plant is situated between James Bay Road and the quarry operating site, along the access road. The area proposed avoids encroaching on the wetlands (map in Appendix 1).

The plant will be transported from southern Québec by truck. The used oils and empty bitumen containers will be taken over by the contractor and transported offsite to be entrusted to a company authorized to manage this type of waste. The fuel supply of the plant and its related equipment will be provided by a local supplier.

At the present time, it is not possible to provide technical details on the type of plant that will be deployed, given that this application seeks to reserve a site for the use of a contractor who has not been selected yet. The contractor will be responsible for the plant's regulatory compliance. Thus, it will have to obtain a departmental authorization under section 22 of the EQA, if applicable. Apart from the crushed rock from the quarry, it is possible that recycled planing materials will also be used as inputs in the production of new bituminous concrete.

In addition to the mobile bituminous concrete plant, the standard equipment will be used for crushing, production, loading and transport of material.

Once the paving work is completed, the plant will be dismantled, and the empty bitumen containers will be compressed and placed in containers to be shipped south for recycling. The site will be graded, as needed, with clean aggregates, and the site will be remediated after ensuring the absence of soil contamination.

3.4 Project Objectives and Justification

James Bay Road was constructed in the early 1970s in the context of development of major hydroelectric projects that marked the region in that period. Over 45 years later, the road connecting Matagami to Radisson requires major repair work. Since 2015, SDBJ has launched various projects with the aim of improving the safety and comfort of road users. These projects will continue until 2021 and thus will benefit several Cree communities for whom James Bay Road remains the only road link connecting the communities with each other and assuring a link to southern Québec.

In general, the work involves repair of pavements, reprofiling of embankments, installation of guard rails at the required locations, maintenance of bridges and complete replacement of hundreds of culverts. In 2020, more specifically, SDBJ plans to perform the following work:

- Complete replacement of 107 deficient culverts;
- Repair of 85 km of pavement between km 0 and 20, between km 35 and 50, between km 270 and 320, and between km 380 and 500 on James Bay Road;
- Upgrade to standards, supply and installation of guard rails between km 0 and 20, between km 35 and 50 and between km 270 and 320;
- Brush clearing and deforestation (road approaches, small areas mainly concerning the culvert ends and the quarries, if applicable).

As in the case of the road repair work of previous years, the needs for aggregates (gravel classes MG 20, MG 56 and MG 112) and clean stone will be assured by local quarries situated in proximity of Route de la Baie-James and anticipated projects.

3.5 Related Activities

The development of an access road is to be planned and its proposed route is illustrated in the plan in Appendix 1. This will have to comply with the *Regulation respecting the sustainable development of forests in the domain of the State* (RSDF).

4 PUBLIC INFORMATION AND CONSULTATION PROCESS

4.1 Information and Consultation Activities Performed

On the regional scale, SDBJ and the Eeyou Istchee James Bay Regional Government are partners on several levels. The repair program for James Bay Road was deployed after consultations with local populations and other community players.

5 DESCRIPTION OF THE MAIN ISSUES AND APPREHENDED IMPACTS OF THE PROJECT ON THE RECEIVING ENVIRONMENT

5.1 Description of the Main Issues of the Project

The environmental and social issues of the development and operation of the quarry at km 305 of James Bay Road are restricted, all in all, considering the small scope of the project (spatial and temporal) and the remote environment in which it is located.

Regarding environmental criteria, protection of wetlands and bodies of water, the potential presence of woodland caribou, the risks of accidental spills of petroleum products, and management of site materials are identified as the main issues.

Concerning the criteria of the human environment, the issues identified as those related to land occupancy and use of resources by the Indigenous peoples, management of noise from the quarry and, indirectly, the efficient operation of the SDBJ road repair project.

5.2 Description of the Apprehended Impacts of the Project on the Receiving Environment

The development of the quarry necessitates deforestation of a maximum area of 7.95 ha, corresponding to the operating area and the site of the mobile bituminous concrete plant. The natural environments affected are essentially terrestrial environments. Pine forests are abundant in the region and the stands that will be affected by operation of the quarry have already suffered natural disturbances in the past (fire in 2002, according to the PIEN data).

By following the vision of the EQA's “Avoid-Minimize-Offset” sequence, optimization of the project has made it possible to avoid encroachment on wetlands competently. Thus, no loss of wetland ecological function is anticipated. Moreover, no body of water will be impacted by the development of the projected quarry. However, it is possible that a culvert will be required under the access road to cross the ditch (if it exists) along James Bay Road.

The noise associated with operation of the quarry could cause disturbances for the neighbouring wildlife, but no impact is anticipated on the woodland caribou or other wildlife species with status, because they are not reported in the sector, according to the information received from the MFFP. Consequently, no work restriction period is required to protect calving and rearing. Mitigation measures specific to fauna, flora or the human environment could be required, however, when issuing the MFFP intervention permit or the authorization under section 22 of the EQA of the MELCC. Finally, because no camp or housing is

found in immediate proximity (radius of 600 m from the quarry), no noise nuisance for the human environment is anticipated. Moreover, the visual impact of the quarry will be almost zero, because it is almost invisible from the road. The operation of the quarry will allow production of aggregate in a sufficient quantity and quality so that all the work is performed at a fair price and within the times required. Everything will be carried out for the benefit of the road users and, ultimately, the Québec State, which is providing 100% of the funding for the SDBJ repair project. The proximity of the quarry to the work site allows reduction of trucking time, which has an influence not only on the operating costs, but also on the safety of the road users during the work.

The preliminary plans and specifications of the SDBJ project include a special specification “185 - Protection de l’environnement” (Protection of the environment) and the contractor is required to comply with it for all of the work, including operation of the quarries, which must comply, in particular, with the authorizations obtained (under section 22 of the EQA and EXL) and the Cahier des charges et devis généraux (General specifications) of the Ministère des Transports. In addition to the mitigation measures that will be an integral part of the application for authorization of quarry 305, specification 185 contains the following elements:

- Production of an environmental protection plan prepared by the contractor;
- Control of sediment transport and runoff water;
- The actions to be taken to prevent petroleum product spills and the actions to be take in case of an accidental spill;
- Management of excavation materials and hazardous residual materials;
- An emergency response plan.

6 GREENHOUSE GAS EMISSIONS

6.1 Greenhouse Gas Emissions

The operation of the quarry and the mobile bituminous concrete plant will have to comply with the standards in force for atmospheric emissions, particularly regarding the EQA and the *Clean Air Regulation*.

The presence on the site of mobile equipment used for the construction work will result in greenhouse gas emissions due to combustion of fossil fuels (diesel, gasoline) in the engines of this equipment. Blasting and operation of the bituminous concrete plan will also lead to greenhouse gas emissions. The greenhouse gases likely to be emitted are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). The fact that the quarry is situated near the work site thereby reduces the trucking needs and the greenhouse gas emissions.

The emission sources for each stage or performance of the project are as follows:

Deforestation

- The rolling stock used consists of deforestation equipment and transport trucks for cut trees of commercial value.

Operation of the Quarry and the Bituminous Concrete Plant

- Stripping of the surfaces with bulldozers and loaders;
- Transport of overburden by transport trucks;
- Drilling equipment;
- Blasting of rock walls;
- Loading of transport trucks;
- Crushing and screening of materials;
- Operation of the bituminous concrete plant;
- Loading of the asphalt trucks.

Reclamation of the Site

- Transport by truck of overburden on the surfaces to be reclaimed;
- Grading of the organic soils put in reserve and slopes for the operating areas with bulldozers and loaders;
- Replanting with species adapted to the environment, which will necessitate transport trucks.

7 OTHER RELEVANT INFORMATION

7.1 Other Relevant Information

The quarry at km 305 is made available to the contractor that will be chosen for the performance of contract SD20-5002-1. However, it is important to note that the SDBJ tender document also allow the contractor to obtain its supply of materials from quarries other than km 305, for which SDBJ will obtain environmental permits (MELCC, MERN, MFFP).

In the event the contractor who wins the call for tenders wishes to operate another quarry that it considers more advantageous, it will be up to that contractor to obtain, at its expense, all the environmental authorizations required to operate the quarry and a mobile bituminous concrete plant.

8 DECLARATION AND SIGNATURE

8.1 Declaration and Signature

I, Anne-Marie Leclerc, M. Sc., Geomorphologist, Project Officer, Environment, Consortium Norda Stelo/Stantec, represent that the documents and information provided in this preliminary information form are accurate to the best of my knowledge.

Any misstatement may result in penalties under the EQA. All the information provided will be an integral part of the application and will be published on the website of the Evaluating Committee (COMEV) or the Kativik Environmental Quality Commission (KEQC) and in the Registre des évaluations environnementales.

	November 21, 2019
Anne-Marie Leclerc, M.Sc., Geomorphologist	Date

Appendix 1

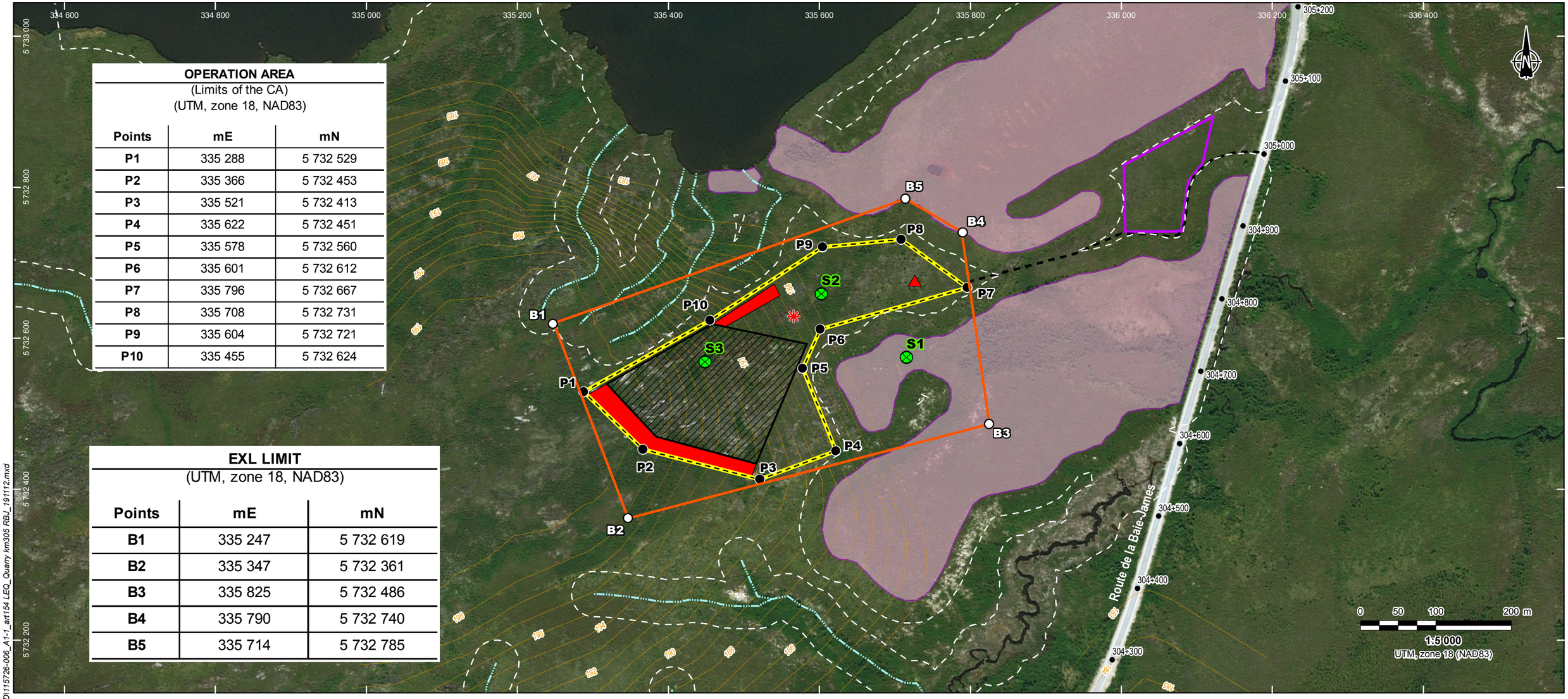
Map A1.1 Development of the quarry and location of the mobile bituminous concrete plant

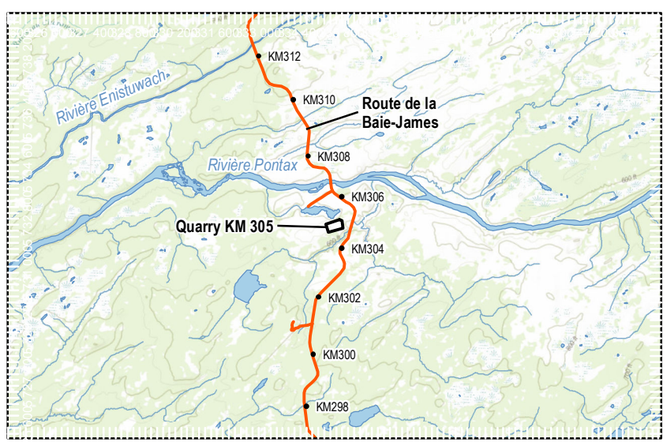
OPERATION AREA
(Limits of the CA)
(UTM, zone 18, NAD83)

Points	mE	mN
P1	335 288	5 732 529
P2	335 366	5 732 453
P3	335 521	5 732 413
P4	335 622	5 732 451
P5	335 578	5 732 560
P6	335 601	5 732 612
P7	335 796	5 732 667
P8	335 708	5 732 731
P9	335 604	5 732 721
P10	335 455	5 732 624

EXL LIMIT
(UTM, zone 18, NAD83)

Points	mE	mN
B1	335 247	5 732 619
B2	335 347	5 732 361
B3	335 825	5 732 486
B4	335 790	5 732 740
B5	335 714	5 732 785





Proposed operating area

- EXL limit (155 455 m²)
- Limit of the operating area (CA limit) (68,883 m²) proposed
- Extraction area (29 492 m²)
- Organic soil storage area
- Proposed bituminous concrete plant (10,653 m²)

Approximate location of the equipment*

- Reserve pile of materials produced
- Screen/crusher proposed
- Access road

** For information only, not to scale.*

Water environments and wetlands

- Probable intermittent watercourse
- Wetland
- Environmental constraint buffer zone (30 m according to s. 15 of the Regulation respecting pits and quarries)
- Validation station

Société de développement de la Baie-James

Operation of a quarry at km 305
of James Bay Highway

Application for exemption
under section 154 of the EQA

Development of the quarry and location of the mobile bituminous concrete plant

115726-006_A1-1_art154 LEQ_Quarry km305 RBJ_191112.mxd
Base carto : ESRI, DigitalGlobe, 2015
November 2019

Map A1.1

CONSORTIUM NORDA STELO Stantec
1032, 3e avenue, Val d'Or, QC, J9P 1T6

Prepared : SCL Draw : YR Verified : AML

Emplacement: Q:\115726.006\200-CONTENU\26-Geomatique\Donnees\MXD\115726-006_A1-1_art154 LEQ_Quarry km305 RBJ_191112.mxd

Appendix 2

Answers from the CDPNQ - Fauna

Ministère des Forêts,
de la Faune
et des Parcs
Québec

Direction de la gestion de la faune du Nord-du-Québec

PAR COURRIEL

Chibougamau, le 23 octobre 2019

Madame Sarah-Claude Lachance
Norda Stelo
1015 avenue Wilfrid Pelletier
Québec (Québec) G1W 0C4

Objet : Requête concernant la présence d'espèces fauniques menacées ou vulnérables ou susceptibles d'être ainsi désignées ou rares situées sur le territoire d'une future carrière, kilomètre 305 de la route de la Baie-James, Nord-du-Québec

Madame,

La présente fait suite à votre demande d'information du 22 octobre 2019, adressée au Centre de données sur le patrimoine naturel du Québec (CDPNQ), concernant l'objet en titre.

Le CDPNQ collige, analyse et diffuse l'information disponible sur les éléments prioritaires de la biodiversité. Pour les espèces fauniques, le traitement est assuré par le ministère des Forêts, de la Faune et des Parcs (MFFP), alors que pour les espèces floristiques, la responsabilité incombe au ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC).

Depuis 1988, les données provenant de différentes sources (spécimens d'herbiers et de musées, littérature scientifique, inventaires récents, etc.) sont intégrées graduellement au système de gestion de données. Les informations consignées reflètent l'état des connaissances. Ainsi, certaines portions du territoire sont méconnues et une partie des données existantes peut ne pas encore être intégrée au système, présenter des lacunes quant à la précision géographique ou encore, avoir besoin d'être actualisée ou davantage documentée. Par conséquent, **l'avis émis par le CDPNQ concernant un territoire particulier ne doit pas être considéré comme étant définitif et un substitut aux inventaires requis. Dans cette éventualité, nous apprécierions obtenir les données brutes recueillies afin de bonifier notre système d'information.**

Après vérification, **aucune espèce faunique en situation précaire** (menacée, vulnérable ou susceptible d'être ainsi désignée) n'est répertoriée au CDPNQ pour le territoire visé par votre requête ou à proximité de celui-ci.

En espérant ces renseignements satisfaisants et utiles à vos besoins, nous vous remercions de l'intérêt porté à l'égard du CDPNQ et demeurons disponibles pour répondre à vos questions. Pour un complément d'information, nous vous invitons à visiter le site Web du CDPNQ : www.cdpnq.gouv.qc.ca.

…2

951, boulevard Hamel,
Chibougamau (Québec) G8P 2Z3
Téléphone : 418 748-7701
Télécopieur : **418 748-3338**
www.mffp.gouv.qc.ca

Pour obtenir la **cartographie légale** des habitats fauniques présents sur le site de votre projet, vous pouvez référer au lien suivant : http://geoboutique.mern.gouv.qc.ca. Dans les *Couches thématiques*, sélectionner : « Couche des habitats fauniques à l'échelle de 1/20 000 ». Veuillez noter que des frais de produits et de services sont applicables.

Veuillez agréer, Madame, l'expression de nos meilleurs sentiments.

Daniel Potvin-Leduc
Technicien de la faune

Ministère des Forêts,
de la Faune
et des Parcs
Québec
Direction de la gestion de la faune du Nord-du-Québec
Secteur des opérations régionales

PAR COURRIEL

Chibougamau, le 23 octobre 2019

Madame Sarah-Claude Lachance
Norda Stelo
1015, avenue Wilfrid Pelletier
Québec (Québec) G1W 0C4

Objet : Requête concernant l'ouverture d'une carrière située à proximité du kilomètre 305 de la route de la Baie-James, Nord-du-Québec

Madame,

En réponse à votre courriel du 26 août 2019, nous vous transmettons les informations suivantes :

- La lettre réponse officielle du Centre de données sur le patrimoine naturel du Québec (CDPNQ).

À titre indicatif, la zone d'étude correspond à une zone circulaire de huit kilomètres de rayon et centrée aux coordonnées -77,377753°O, 51,720847°N.

Aucune occurrence d'espèce enregistrée au CDPNQ n'est retrouvée au sein de la zone d'étude. Toutefois, la rivière Pontax, qui traverse la zone d'étude, est un habitat de l'Esturgeon jaune (*Acipenser fulvescens*), une espèce susceptible d'être désignée comme menacée ou vulnérable.

Aucun habitat faunique cartographié en vertu du Règlement sur les habitats fauniques (RHF) de la Loi sur la conservation et la mise en valeur de la faune (LCMVF) n'est retrouvé à l'intérieur de la zone d'étude. En ce qui concerne l'habitat du poisson, qu'il soit cartographié ou non, il demeure protégé en vertu de la LCMVF et du RHF.

Veuillez enfin noter que l'absence d'une ou plusieurs espèces pour un secteur donné ne signifie pas que cette ou ces espèces ne sont pas présentes sur ce territoire, puisque des inventaires exhaustifs n'ont pas été faits pour l'ensemble des espèces sur notre territoire. De plus, la répartition spatiale de toute espèce peut changer selon l'évolution des écosystèmes et en réponse à des pressions environnementales de cause naturelle ou anthropique.

En tout temps, la DGFa-10 invite le demandeur à transmettre toutes mentions fauniques dans le secteur visé par les travaux et dans les environs. Le demandeur peut envoyer ses observations à l'adresse Nord-du-Quebec.faune.information@mffp.gouv.qc.ca en

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951, boulevard Hamel
Chibougamau (Québec) G8P 2Z3
Téléphone : 418 748-7701
Télécopieur : 418 748-3338
www.mffp.gouv.qc.ca

indiquant le nom et les coordonnées de l'observateur, le nombre d'individus observés, la date et les coordonnées géographiques précises.

Les données demeurent la propriété du ministère des Forêts, de la Faune et des Parcs. Vous ne pouvez vendre, donner, prêter, échanger ou transmettre ces informations à des tiers sans notre accord. De plus, l'information transmise doit être utilisée uniquement pour les travaux cités dans votre demande. Une nouvelle demande écrite devra nous être acheminée pour toute autre utilisation de ces informations. Enfin, il est à noter qu'aucune partie de celles-ci ne peut être utilisée à des fins lucratives par l'utilisateur autorisé.

Veuillez recevoir, Madame, nos plus cordiales salutations.

Daniel Potvin-Leduc
Technicien de la faune

P.J. (1)

Anne-Marie Leclerc

De: Anne-Marie Leclerc
Envoyé: 14 août 2019 14:35
À: Vinet, Frederic; Sarah-Claude Lachance
Objet: TR: SDBJ: demande d'information - présence de caribous - 5 sites de nouvelles carrières potentielles

Catégories: 115726_SDBJ

PVI

De : Second, Julien (10-DGFa) [mailto:Julien.Second@mffp.gouv.qc.ca]
Envoyé : 14 août 2019 13:33
À : Anne-Marie Leclerc
Cc : Stéphane Hallé; Godin, Éric; Anctil, Alexandre (10-DGFa)
Objet : RE: SDBJ: demande d'information - présence de caribous - 5 sites de nouvelles carrières potentielles

Bonjour Anne-Marie,

Aucune contrainte faunique selon les coordonnées fournies, elles se situent un peu au nord de la fréquentation connue, et il ne semble pas y avoir d'autres enjeux particuliers.
J'en profite pour vous informer que je quitterai la région le 23 août et que pour l'instant Alexandre Anctil, en cc, va assurer le suivi du dossier.
Merci et bonne journée!

Julien Second, **Biologiste, M. Sc.**
Direction de la gestion de la faune du Nord-du-Québec
Ministère des Forêts, de la Faune et des Parcs
951, boulevard Hamel
Chibougamau (Québec) G8P 2Z3
Téléphone : 418 748-7701, poste 240
julien.second@mffp.gouv.qc.ca
mffp.gouv.qc.ca

Développer, valoriser, préserver.
Naturellement!

De : Anne-Marie Leclerc [mailto:Anne-Marie.Leclerc@norda.com]
Envoyé : 13 août 2019 11:56
À : Second, Julien (10-DGFa) <Julien.Second@mffp.gouv.qc.ca>
Cc : Stéphane Hallé <Stephane.Halle@norda.com>; Godin, Éric <Eric.Godin@stantec.com>
Objet : SDBJ: demande d'information - présence de caribous - 5 sites de nouvelles carrières potentielles

Bonjour M. Second,

Comme discuté au téléphone, dans le cadre des travaux d'entretien de la route de la Baie-James prévus en 2020, le Société de développement de la Baie-James (SDBJ) est déjà à évaluer le potentiel de cinq (5) nouvelles carrières. Le but est de retenir ultimement une (1) carrière entre les km 270 et 320 et une (1) carrière entre les km 320 et 380 pour fournir les granulats nécessaires notamment aux contrats de pavage.

De façon à orienter le plus en amont possible les investigations nécessaires, nous aimerions savoir si, d'ores et déjà, il existe des contraintes au niveau de la **présence de corridors fauniques utilisés par la caribou, en tout premier lieu. Aussi, s'il y a présence de tout autre élément faunique qui puisse représenter une contrainte d'exploitation, nous aimerions en être informés.**

En effet, il est impératif pour la SDBJ de donner accès au à l'entrepreneur **au plus tard le 31 mars 2020**. La production commencerait rapidement après le déboisement. La période de production est prévue pour avril, mai et juin, des périodes qui sont critiques pour le caribou. Ainsi, l'obligation de respecter une période de restriction pourrait être un facteur d'élimination de sites actuellement envisagés.

Je vous présente ci-dessous un tableau des sites actuellement à l'étude. Des investigations de terrain doivent y avoir lieu sous peu.

En pièce jointe, vous avez également deux fichiers Google Earth pour mieux visualiser. Les limites doivent être considérées comme préliminaires, voire exploratoires, mais je crois que le niveau de détail fourni est suffisant pour les besoins actuels concernant la présence de caribous ou espèces fauniques menacées.

Une réponse serait appréciée idéalement cette semaine ou encore, la suivante. Le sous-traitant souhaite se mobiliser rapidement et prépare actuellement son programme de travail. Je vous prierais de me laisser savoir s'il ne vous est pas possible de nous répondre d'ici le 16 août, nous comprenons également que nous sommes en période de vacances pour certaines ressources.

SDBJ - Identification de sites potentiels de carrière entre les chaînages 270+000 à 320+000 et 320+000 à 380+000

Site potentiel de carrière	Coordonnées centrales (MTM zone 9)		Superfice (ha)	Hauteur moyenne exploitable (m)	Volume potentiel de roc exploitable (m^3)	Volume potentiel de roc foisonné (x 1.3) (m^3)	Long approxim chemin d (m
	Easting (X)	Northing (Y)					
Secteur compris entre les KM 270 à 320							
CA-287,1	239521	5717103	2,95	5	125 000	162 500	19
CA-297,3	242760	5725286	2,9	6	150 000	195 000	62
CA-305	243850	5731934	2,95	6	150 000	195 000	36
Secteur compris entre les KM 320 à 380							
CA-369,7	261318	5779898	2,94	7	180 000	234 000	11
CA-376,5	264983	5784421	2,93	10	250 000	325 000	25

N'hésitez pas à me joindre pour de plus amples informations.

Sincières saluations!

Anne-Marie Leclerc, **M.Sc., géographe-géomorphologue**
Responsable de projets
Environnement

t. (514) 393-9110 p. 40215
c. (514) 799-6417

Mobiliser l'intelligence collective.

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