



**GWICH'IN LAND AND WATER BOARD**

**P.O. Box 2018, Inuvik, NT X0E 0T0**

**867-777-4954**

**867-777-2304**

**glwb.com**

**PRELIMINARY SCREENING REPORT FORM**

<p><b>PRELIMINARY SCREENER:</b> GLWB (AlecSandra Macdonald)  <b>REFERENCE / FILE NUMBER:</b> G19S004  <b>TITLE:</b> Geotechnical Drilling at km 36.7 Dempster Highway #8  <b>ORGANIZATION:</b> GNWT Department of Infrastructure  <b>MEETING DATE:</b> March 20, 2019</p>	<p><b>EIRB REFERENCE NUMBER:</b></p>
---	--------------------------------------

*NOTE: Amendment items on this preliminary screening form are shown in italics.*

**Type of Development:**  
(CHECK ALL THAT APPLY)

- New
- Amend, EIRB Ref. #
- Requires permit, license or authorization
- Does not require permit, license or authorization

**Project Summary**

- Geotechnical investigation for proposed Dempster Highway Maintenance Camp at previously disturbed quarry location

**Scope**

- A) Conduct a geotechnical drilling operation

**Principal Activities (related to scoping)**

(CHECK ALL THAT APPLY)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Construction               | <input type="checkbox"/> Exploration       | <input type="checkbox"/> Decommissioning     |
| <input type="checkbox"/> Installation               | <input type="checkbox"/> Industrial        | <input type="checkbox"/> Abandonment         |
| <input type="checkbox"/> Maintenance                | <input type="checkbox"/> Recreation        | <input type="checkbox"/> Aerial              |
| <input type="checkbox"/> Expansion                  | <input type="checkbox"/> Municipal         | <input type="checkbox"/> Harvesting          |
| <input type="checkbox"/> Operation                  | <input type="checkbox"/> Quarry            | <input type="checkbox"/> Camp                |
| <input type="checkbox"/> Repair                     | <input type="checkbox"/> Linear / Corridor | <input type="checkbox"/> Scientific/Research |
| <input type="checkbox"/> Water Intake               | <input type="checkbox"/> Sewage            | <input type="checkbox"/> Solid Waste         |
| <input type="checkbox"/> Other: <b>Geotechnical</b> |  |  |

**Principal Development Components (related to scoping)**

- |   |  |
|---|--|
| <input type="checkbox"/> Access Road                                | <input type="checkbox"/> Waste Management            |
| <input type="checkbox"/> construction                               | <input type="checkbox"/> Disposal of hazardous waste |
| <input type="checkbox"/> abandonment/removal                        | <input type="checkbox"/> Waste generation            |
| <input type="checkbox"/> modification e.g., widening, straightening | <input type="checkbox"/> Sewage                      |
| <input type="checkbox"/> Automobile, Aircraft or Vessel Movement    | <input type="checkbox"/> Disposal of sewage          |
| <input type="checkbox"/> Blasting                                   | <input type="checkbox"/> Geoscientific Sampling      |
| <input type="checkbox"/> Building                                   | <input type="checkbox"/> trenching                   |
| <input type="checkbox"/> Burning                                    | <input type="checkbox"/> diamond drill               |
| <input type="checkbox"/> Burying                                    | <input type="checkbox"/> borehole core sampling      |
| <input type="checkbox"/> Channeling                                 | <input type="checkbox"/> bulk soil sampling          |
| <input type="checkbox"/> Cut and Fill                               | <input type="checkbox"/> Gravel                      |

- Cutting of Trees or Removal of Vegetation
- Dams and Impoundments
  - construction
  - abandonment/removal
  - modification
- Ditch Construction
- Drainage Alteration
- Drilling other than Geoscientific
- Ecological Surveys
- Excavation
- Explosive Storage
- Fuel Storage
- Topsoil, Overburden or Soil
  - fill
  - disposal
  - removal
  - storage

- Hydrological Testing
- Site Restoration
- fertilization
- grubbing
- planting/seeding
- reforestation
- scarify
- spraying
- recontouring
- Slashing and removal of vegetation
- Soil Testing
- Stream Crossing/Bridging
- Tunneling/Underground
- Other (describe):

**NTS Topographic Map Sheet Numbers**

(LIST ALL THAT APPLY)

107 B7

**Latitude / Longitude and UTM System:**

Minimum Latitude: 67°13'23"N  
 Maximum Latitude: 67°13'23"N

Min Longitude : 135°34'44"W  
 Max Longitude : 135°34'44"W

**Nearest Community and Water Body:**

- Fort McPherson

- Vittrekwa River

**Land Status (*consultation information*)**

Private (GSA)

Commissioners Land

Territorial Land

Municipal Land

**Transboundary Implications**

British Columbia

Alberta

Saskatchewan

Yukon

Nunavut

Wood Buffalo National Park

Inuvialuit Settlement Region

**Type of Transboundary Implication:**

Impact / Effect

Development

Public Concern

(DESCRIBE)

**PHYSICAL - CHEMICAL EFFECTS**

**IMPACT**

**1. Ground Water**

- water table alteration
- water quality changes

- infiltration changes
- other
- N/A

**IMPACT**

**2. Surface Water**

- flow or level changes
- water quality changes

- water quantity changes
- Drainage pattern changes
- temperature
- wetland changes / loss
- other:
- N/A

**IMPACT**

**3. Noise**

- noise in/near water
- other: noise increase

**IMPACT**

**4. Land**

- geologic structure changes
- soil contamination

- buffer zone loss
- soil compaction & settling
- Destabilization / erosion
- permafrost regime alteration
- other:

- N/A

**MITIGATION**

Small risk of encountering artesian well. Bentonite shall be used to plug any flowing groundwater.

**MITIGATION**

Possibility of contamination from fuel during transport or refueling. No fuel will be stored on site. The applicant has submitted a Spill Contingency Plan, outlining preventive measures and spill clean-up. Conditions address fuel containment and spill kits.

**MITIGATION**

**MITIGATION**

Possibility of contamination from fuel during transport or refueling. No fuel will be stored on site. The applicant has submitted a Spill Contingency Plan outlining preventive measures and spill clean-up. Conditions address fuel containment and spill kits.

Possibility of subsidence if water enters the bore holes. Condition requires holes be covered with fill upon completion of drilling.

**IMPACT**  
**5. Non Renewable Natural Resources**

**MITIGATION**

- resource depletion
- other:
- N/A

**IMPACT**  
**6. Air/Climate/ Atmosphere**

**MITIGATION**

- Other
- N/A

**BIOLOGICAL**

**ENVIRONMENT IMPACT**  
**1. Vegetation**

**MITIGATION**

- species composition
- species introduction
- toxin / heavy accumulation
- other:
- N/A

localized brush clearing may take place, but will be minimal as the majority of the site has been previously cleared

**IMPACT**  
**2. Wildlife & Fish**

**MITIGATION**

- effects on rare, threatened or endangered species
- fish population changes
- waterfowl population changes
- breeding disturbance
- population reduction
- species diversity change
- health changes  
(Identify)

behavioural changes

(Identify)

habitat changes / effects

game species effects

toxins / heavy metals

forestry changes

agricultural changes

other:

N/A

#### **INTERACTING ENVIRONMENT**

##### **IMPACT**

##### **MITIGATION**

###### **1. Habitat and Communities**

predator-prey

wildlife habitat / ecosystem  
Composition changes

reduction / removal of keystone  
or endangered  
species

removal of wildlife corridor or  
buffer zone

other:

N/A

##### **IMPACT**

##### **MITIGATION**

###### **2. Social and Economic**

planning / zoning changes or  
conflicts

increase in urban facilities or  
services use

rental house

airport operations / capacity  
changes

human health hazard

- impair the recreational use of water or aesthetic quality
- affect water use for other purposes
- affect other land use operations
- quality of life changes
- public concern
- other:
- N/A

**IMPACT**

**3. Cultural and Heritage**

**MITIGATION**

- effects to historic property
- increased economic pressure on historic properties
- change to or loss of historic resources
- change to or loss of archaeological resources
- increased pressure on archaeological sites
- change to or loss of aesthetically important site
- effects to aboriginal lifestyle
- other:
- N/A

If any new cultural or heritage resource site is discovered during the project, work must cease and the Prince of Wales Northern Heritage Centre shall be contacted immediately. LUP Conditions 22-23 pertain to archaeological and heritage resources.

**PRELIMINARY SCREENER / REFERRING BODY INFORMATION**  
(CHECK ALL THAT APPLY)

	RA or DRA	ADVICE	PERMIT REQUIRED
Environment Canada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fisheries and Oceans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indian and Northern Affairs Canada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canadian Heritage (Parks Canada)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural Resources Canada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Works and Gov't Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transport Canada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Northern Oil and Gas Directorate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canadian Nuclear Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industry Canada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canadian Transportation Agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Defence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GNWT – ENR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GNWT - MACA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GNWT - infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GNWT - Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GNWT – Department of Lands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prince of Wales Heritage Center	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker's Compensation Board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MEISC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MIWB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gwich'in Land and Water Board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Gwich'in Land Use Planning Board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gwich'in Renewable Resource Board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gwich'in Social & Cultural Institute	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gwich'in Tribal Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gwichya Gwich'in Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gwichya Gwich'in Renewable Resources Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nihtat Gwich'in Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nihtat Gwich'in Renewable Resource Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teet'it Gwich'in Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teet'it Gwich'in Renewable Resource Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ehdiitat Gwich'in Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ehdiitat Renewable Resource Council	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hamlet of Aklavik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hamlet of Fort Mcpherson	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charter Community Of Tsiigehtchic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Town of Inuvik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**REASONS FOR DECISION**  
**(LIST ALL REASONS AND SUPPORTING RATIONALES FOR PRELIMINARY SCREENING DECISION)**

**DECISION:**

The Gwich'in Land and Water Board (The Board) is satisfied that the preliminary screening of application G19S004 by GNWT Infrastructure for Geotechnical Drilling at km 36.7, Dempster Highway #8 has been completed in accordance with Section 125 of the *Mackenzie Valley Resource Management Act*.

The Board is satisfied that a reasonable period of notice was given to Communities and First Nations affected by the application as required by Subsection 63(2) of the *MVRMA* so that they could provide comments to the Board.

Having reviewed all relevant evidence on the Public Registry, including the submissions of the Applicant, the written comments received by the Board and any staff reports prepared for the Board, the Board has decided that in its opinion that:

- there is no likelihood that the proposed development might have a significant adverse impact on the environment; and
- there is no likelihood that the proposed development might be a cause of public concern.

The Board is also of the opinion that the application can proceed through the regulatory process and that any impacts of the development on the environment can be mitigated through the imposition of the terms and conditions in the attached Land Use Permit.

As a result, the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope and intent of the *Mackenzie Valley Resource Management Act* and the Mackenzie Valley Land Use Regulations has decided that this Land Use Permit be issued subject to the terms and conditions contained therein.

PRELIMINARY SCREENING DECISION	
<input checked="" type="checkbox"/>	<b>Outside Local Government Boundaries</b>
<input type="checkbox"/>	The development proposal might have a significant adverse impact on the environment, <i>refer it to the EIRB.</i>
<input checked="" type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input checked="" type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	<b>Wholly within Local Government Boundaries</b>
<input type="checkbox"/>	The development proposal is likely to have a significant adverse impact on air, water or renewable resources, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>

  
 \_\_\_\_\_  
 Chair, Gwich'in Land and Water Board