[illegible][illegible][illegible]

Period of operation:

$b \leq r^b b \Delta \geq D \sigma \triangleleft \nabla f \Gamma \leq D \leq c$ :

Λαμβάνονται 4<sup>ος</sup> και 5<sup>ος</sup>:

Franz Seibel

Keewaytinook Okimakanak

730 S Syndicate Ave

Thunder Bay ON P8T1B9

Canada

$\Delta^{\text{b}}_{\text{c}} \Delta^{\text{a}}_{\text{c}}$ : 807.632.2035,  $\Delta^{\text{b}}_{\text{c}} \Delta^{\text{b}}_{\text{d}}$ : 807.577.2665

$\gamma_b \Delta^c \dot{\gamma} \Pi \sigma^b$      $\Lambda c_n d^b \gamma \sigma d n d^b l^a \sigma^b$

**PĐΔΔNŃ:** Keewaytinook Okimakanak a confié à Seaforth Geological Surveys et le navire William Kennedy de l'Arctic Research Foundation le mandat d'effectuer un levé bathymétrique (sonar) en septembre et octobre 2023 entre Kuujjuarapik, Peawanuck et Fort Severn. Le bateau d'exploitation et son équipage de 14 personnes devraient terminer le levé en 45 jours. L'objectif de cette étape du levé marin est de déterminer le tracé potentiel d'un câble marin à fibre optique entre Kuujjuarapik et les deux nations crie de l'Ontario. Si l'étape du levé de la voie maritime et toutes les autres autorisations de construction sont approuvées, le câble à fibres optiques pourrait être installé à l'été 2026. Les nations crie isolées de Peawanuck et de Fort Severn ont besoin d'une connexion à large bande (internet) à long terme par fibre optique pour accéder à des services essentiels comme la santé, l'éducation et des services administratifs, mais aussi pour la surveillance de l'environnement menée par la communauté.

[illegible]

Operations Phase: from 2023-09-01 to 2023-10-31

$$\Lambda \subset \mathbb{N} \times \mathbb{N} \rightarrow \mathbb{R}^{\mathbb{N} \times \mathbb{N}}$$
[illegible]

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[illegible]



[illegible]

Transboundary  
South Baffin

[illegible][illegible]

### Project transportation types

Transportation Type	Arctic Research Vessel	Length of Use
Water	The Arctic Research Foundation's vessel the William Kennedy	

### Project accomodation types

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Magnetometer	1	2meters X 45cm	Identify the existing KRG EAU FON cable crossing point
Vibracore	1	3meters X 50cm	Core sampling at 5km intervals (with additional sample sites if required, as dictated by observed geology) within water depths <25m at the Fort Severn, Peawanuck, and Kuujjuaraapik shore landing corridors to determine geotechnical properties of the soil
Grab Sampler	1	50cm X 3 meters	After three failed attempts, surficial grab sampling at 5km intervals (with additional sample sites if required, as dictated by observed geology) within water depths <25m at the Fort Severn, Peawanuck, and Kuujjuaraapik shore landing corridors to determine geotechnical properties of the soil
Pole mounted, towed geophysical survey equipment: Multibeam Echosounder	1	1 meter X 1 50cm	Obtain a 500m wide survey corridor in water depths >50m, and 250m wide survey corridor in water depths <50m
Side scan sonar (SSS)	1	2 meters X 50cm	Obtain a 500m wide survey corridor in water depths >50m, and 250m wide survey corridor in water depths <50m
Sub bottom profiler (SBP)	1	1 meter X 1 meter	Obtain a 500m wide survey corridor in water depths >50m, and 250m wide survey corridor in water depths <50m

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ሥራ ስርዓት ስም	የሥራ ስርዓት ስም	የሥራ ስርዓት ስም	የሥራ ስርዓት ስም	የሥራ ስርዓት ስም	የሥራ ስርዓት ስም	የሥራ ስርዓት ስም
Diesel	fuel	3	12000	36000	Liters	Propulsion and power generation

ΔL<sup>96</sup> ΔD<sup>96</sup> C<sub>D</sub>ΔL<sup>96</sup> ΔD<sup>96</sup>

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1	Sea water is drawn through a screen to stop any marine life from entering. The vessel is equipped with two 114 L/Hour reverse osmosis water makers. The vessel has freshwater tanks (capacity 3400L).	Freshwater will be taken in Churchill. Once this water has been used up, if needed, sea water will be retrieved in small amounts from the ocean to replenish the freshwater supply.

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Information is not available				

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Negative environmental impacts are not anticipated caused by the project to lands, waters, or natural resources, including wildlife. The marine survey will not capture, handle or dispose of any wildlife species. The survey team will report any incidents resulting in wildlife being killed. At no point will the marine survey disrupt the traditional practices of the people. Based on best practices of the Eastern Arctic Undersea Fibre Optic Network (EAUFON) project in Nunavik, and the DFO July 4, 2023 Letter of Advice, the following will be implemented during the marine survey. 1. The use of minimum gear power level to achieve the survey objectives will be used to reduce the impact on aquatic life. 2. Ramp up procedure will be completed with gradual increase in power of survey equipment to reduce impact on aquatic life. 3. Cetacean monitoring by visual observation post will be completed. The survey will begin only if cetaceans are absent from the survey zone and stop survey if cetaceans are present. A summary cetacean sightings report will be provided to appropriate agencies following the survey completion. 4. Plan in-water works, undertakings and activities to respect timing windows to protect fish and fish habitat. 5. Plan in-water works, undertakings and activities to respect timing windows, or as stipulated by the Ministry of Natural Resources and Forestry (MNRF), to protect fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed and migrate. 6. Develop and implement a response plan to prevent a spill of deleterious substances from entering a waterbody. 7. The marine survey will not capture, handle or dispose of any wildlife species. The survey team will report any incidents resulting in wildlife being harmed or killed. 8. The marine survey will not enter any rivers.

### Additional Information

## SECTION A1: Project Info

## SECTION A2: Allweather Road

### SECTION A3: Winter Road

## SECTION B1: Project Info

## SECTION B2: Exploration Activity

### SECTION B3: Geosciences

## SECTION B4: Drilling

## SECTION B5: Stripping

## SECTION B6: Underground Activity

SECTION B7: Waste Rock

## SECTION B8: Stockpiles

## SECTION B9: Mine Development

## SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

## SECTION C1: Pits

## SECTION D1: Facility

## SECTION D2: Facility Construction

### SECTION D3: Facility Operation

#### SECTION D4: Vessel Use

## SECTION E1: Offshore Survey

## SECTION E2: Nearshore Survey

### SECTION E3: Vessel Use

## SECTION F1: Site Cleanup

## SECTION G1: Well Authorization

## SECTION G2: Onland Exploration

### SECTION G3: Offshore Exploration

SECTION G4: Riga

## SECTION H1: Vessel Use

Seaforth Geosurveys Inc and the Arctic Research Foundation will be completing the marine survey aboard the William Kennedy. The marine survey is estimated to be conducted for up to 45 days (24hours/day) conducting the bathymetric and geophysical survey. A survey launch will be deployed during the daylight hours to conduct survey operations across the cable corridor in the shallow nearshore water depths (<10m) and to come to shore to inspect the existing shore landing and beach manhole at Kuujjuaraapik and the proposed shore landings at Peawanuck and Fort Severn. Pole-mounted, towed geophysical survey equipment including swath bathymetry (MBES), sidescan sonar (SSS) and subbottom profiler (SBP) will be used to obtain a 500m wide survey corridor in water depths >50m, and 250m wide survey corridor in water depths <50m. A magnetometer will be used to identify the existing KRG EAU FON cable crossing point. A vibracore sampling will be completed at 5km intervals (with additional sample sites if required, as dictated by observed geology) within water depths <25m at the Fort Severn and Peawanuck shore landing corridors to determine geotechnical properties of the soil. If upon three failed vibracore attempts, a surficial grab sample will be taken.

## SECTION H2: Disposal At Sea

N/A

## SECTION 11: Municipal Development

[illegible]



[illegible][illegible]

### Miscellaneous Project Information

[illegible]

### Cumulative Effects

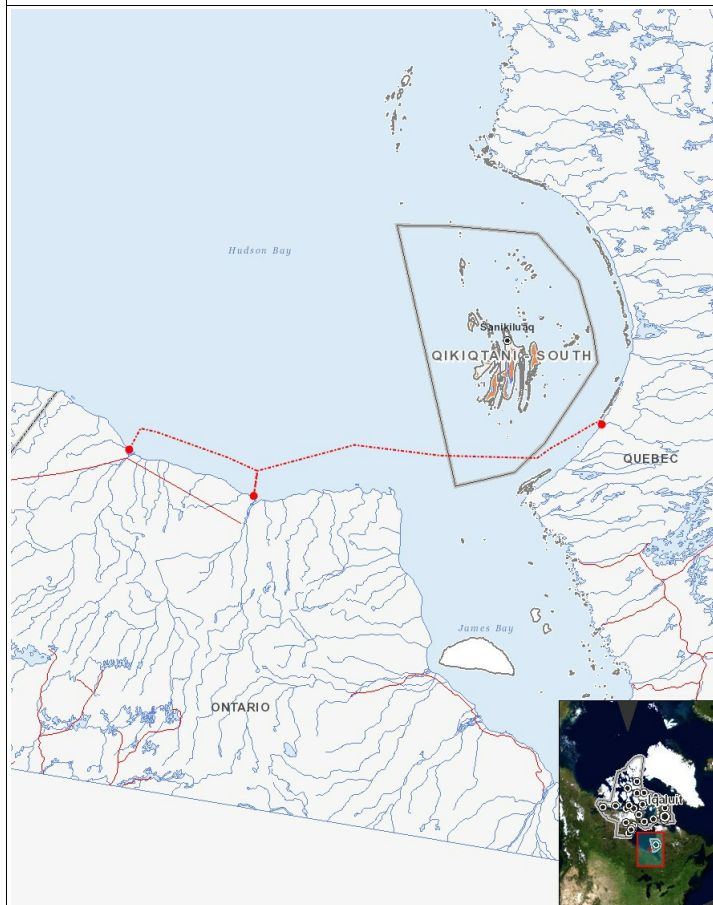
The marine survey is in operation over 45 days and does not have any cumulative effects aside from operating the vessel and the burning of up to 36,000L of fuel which will contribute to greenhouse gas accumulations. The long-term effects of reliable scalable broadband in the two remote Cree Nations include the ability for the Cree to continue to remain connected to the land, language, culture and identity sharing traditional skills and strengthening their way of life for future generations. The Socio-economic impacts to the Fort Severn and Peawanuck communities include: 1) Increased access to healthcare and human health programs; 2) Employment in construction and operation of their community-owned broadband companies; 3) Long-term scalable broadband infrastructure; 4) Community wellness by remaining connected to the land, language and traditional skills, and monitoring the health of the water, land and wildlife.



## Impacts

உடைய  $\Delta^{\text{b}} \text{CD}$   $\sigma^{\text{b}} \text{r}^{\text{c}}$   $\text{d} \text{e} \text{f} \text{g} \text{h} \text{i} \text{j} \text{k} \text{l} \text{m} \text{n} \text{o} \text{p} \text{q} \text{r} \text{s} \text{t} \text{u} \text{v} \text{w} \text{x} \text{y} \text{z}$   $\text{a} \text{b} \text{c} \text{d} \text{e} \text{f} \text{g} \text{h} \text{i} \text{j} \text{k} \text{l} \text{m} \text{n} \text{o} \text{p} \text{q} \text{r} \text{s} \text{t} \text{u} \text{v} \text{w} \text{x} \text{y} \text{z}$

[illegible]
$$(P = \mathbb{Q}b\mathbb{Q} \cap \mathbb{Q}a^{\mathbb{Q}})^c, N = \mathbb{Q}b\mathbb{Q} \cap \mathbb{Q}c\mathbb{Q} \cap \mathbb{Q}a^{\mathbb{Q}})^c \subseteq \mathbb{Q}c\mathbb{Q} \cap \mathbb{Q}a^{\mathbb{Q}})^c \subseteq \mathbb{Q}c\mathbb{Q} \cap \mathbb{Q}a^{\mathbb{Q}})^c, M = \mathbb{Q}b\mathbb{Q} \cap \mathbb{Q}c\mathbb{Q} \cap \mathbb{Q}a^{\mathbb{Q}})^c \subseteq \mathbb{Q}c\mathbb{Q} \cap \mathbb{Q}a^{\mathbb{Q}})^c \subseteq \mathbb{Q}c\mathbb{Q} \cap \mathbb{Q}a^{\mathbb{Q}})^c, U = \mathbb{Q}b\mathbb{Q} \cap \mathbb{Q}a^{\mathbb{Q}})^c$$



#### List of Project Geometries

1	polyline	Proposed Marine Survey Route
2	point	Fort Severn Cree Nation Proposed Shore Landing
3	point	Peawanuck Cree Nation Proposed Shore Landing
4	point	Kuujuaraapik Existing Shore Landing

