



NIRB Application for Screening #125720

Far North Fiber Marine Route Survey

Application Type: New

Project Type: Marine Based Activities

Application Date: 6/24/2022 5:42:12 PM

Period of operation: from 0001-01-01 to 0001-01-01

Proposed Authorization: from 0001-01-01 to 0001-01-01

Project Proponent: Ilk Icard
Far North Digital
200 W 34th Avenue, #424
Anchorage AK 99503
United States
Phone Number:: 3609811704, Fax Number::

DETAILS

Non-technical project proposal description

English: Far North Digital LLC is developing the Far North Fiber cable project. It is the first submarine fiber optic cable to be laid through the Arctic Ocean and the Northwest Passage connecting Asia and Northern Europe. The 14,000km route extends through Canadian waters entering the Queen Elizabeth Islands from the west through McClure Strait, proceeding through Viscount Melville Sound, Barrow Strait and Lancaster Sound, then exiting into Baffin Bay and south through Davis Strait into the North Atlantic Ocean. The cable will incorporate a number of branching units which will provide for future branches to strategic landing sites in Canada's Arctic Archipelago. This application is made for, and limited to, activities involved in the marine route survey for the future communications corridor. The application covers shipboard marine survey activities that will determine a suitable route for the future installation of the Far North Fiber cable. The work associated with installation of the cable will be the subject of a future, separate permit application. The approximate route length of the cable through Canada's territorial seas is 1,360 kilometers. Of that, roughly 900 km traverses Nunavut waters. The survey corridor will be 500 meters wide along the length of the route. The Marine Survey will be performed along the cable route to ensure that the cable system is installed on the most benign seabed, avoiding any adverse impacts on sensitive living marine resources and clear of any features which could pose a threat to the design life of the cable system. The geophysical and geotechnical investigation of the route establishes a detailed profile of the seabed corridor where the cable is to be laid. The survey will include a Burial Assessment Survey (BAS) which consists of Cone Penetrometer Testing (CPT) and measurements to predict the soil type, its relative density and shear strength. The output of this activity enables production of a unique cable profile which is specifically adapted to the nature of the seabed to ensure long-term durability of the cable. Project timeline makes conservative allowance for survey activities over the entire cable route from Japan to Europe for up to two and a half years, affording opportunity for weather and ice dependent effort in the Arctic for up to three summer seasons, 2022-2024. Survey operations will be conducted on a 24-hour basis, weather and sea conditions permitting, and the survey vessel will display the shapes and lights prescribed in the International Rules for the Prevention of Collisions at Sea (COLREGS) Rule 27, to indicate that the survey vessel is restricted in its ability to maneuver. A listening watch will be maintained at all times on VHF Channel 16, and the vessel will actively transmit an AIS signal. Coordinates of the survey area will be broadcast at regular intervals on Channel 16 and appropriate working channels as prescribed Notices to Mariners.

French: tbd

Inuinnaqtun: Far North Digital LLC pivallialiqtut Ungahiktumi Tununnganaq Ivalutut ittu alrujaq havaaq. Hivulliqpaanguuvluni tarjurmi iluaniiittut umiaqtut qiplariktu ivalutut ittu alrujaq innanganiaqhimajuq uvani Ukiuqtaqtuq Tarjunga unalu Tununngani Uataanit Ikaaruhiq katilviujuq Asia unalu Tununnganaq Europemi. Una 14,000 kilamiitastigut ungahingnia uvuuna Kanatamiunut imat itiliqtaa hamna Queen Elizabeth Qikiqtangit uvanngat uataanit uvuuna McClure Ikaangit, Ikaaq, pilihaaqhuni uvuuna Viscount Melville Kangiqhua, Barrow Ikaaq unlu Lancaster Kangiqhua, ikaaqhuni iluanut Qikiqtaaluk unalu hivuraanit uvuuna Davis Strait iluanut Tununnganaq Atlantic Tarjua. Una alrujaq ilaginiaqtangit amihuujut qupikhimajangit ilagijaujut tunijakhaat hivunikhangit qupikhimajut parnaijaijakhaat minnahuaraangat najugaanut iluani Kanatam Ukiuqtaqtuq Qikiqtalinnuit. Una tukhiutijangit hanajauhimajut haffuman, unalu iniqhimaitut, hulidjuhiit ilagijaujut imarmiutaujut iningit nalunaijajut hivunikhangit tuhagakhaujut tulagvik. Una tukhiutijangit pulahimajangit umiaqtuqtunut agjaqtut imarmiuttat nalunaijainingit hulijakhangit ihumaliuqtakhaat ajurnattumik apqutikhangit hivunikhanut iliuraihimajangit haffuman Ungahiktumi Tununnganaq Ivalutut ittu alrujaq. Una havaaq ilagijaujut iliurainirnut haffuman alrujaq ihumaginiaqtangit hivunikhangit, ahikkut laisiata ilanganit tukhiutijakhaat. Takiniqhaujungnaqhiyuq haffuman alrujaq uvuuna Kanatam nunallaangit tarjuat hamnauvlutik 1,360 kilamiitastigut ungahingnia. Haffuman, 900 kilamiitastigut ungahingniqarungnaqhiyuq ikaaqtut Nunavut imainnit. Una nalunaijajut tulagvik takiniqhaa 500 miitas hilingnia haniraanit takiniqhaa ikaarninga. Una Imarmiuttaq Nalunaijainingit iniqhimajakhaat hinaanit alrujangit ikaarninga pidjarikhigiami alrujaqarvik iliuraqhimajuq aqittumi tarjum natia, pittailivlugit pijumanngittangit ihuilaatuuhimajut qajangnaqtumik inuuhimajut imarmiuttat avataita tutqirnaqtumik hup ilitquhianit ajuqhautihimalaaqtangit hivuuranarningat tiliugarnit inuuhanit haffuman alrujaqarvik. Una nunaliqiningit unalu nuna qaujiharningit qimilruqtaat haffuman inikhangit aulapkaihimajut tukiliuqhimajuq haffuman tarjuq tukinga natia tulagvinga hamna alrujaq nalahimajuq. Una nalunaijainingit ilagilaqaqtangit Iluvirvingat Ihivriurningit Nalunaijainiq (BAS) ilagijaat Takkaq Imarmi Uuktuitigiangit Ihivriurjut (CPT) unalu uuktuitigiangit kangiqhiinnaqtangit marlunga tukiliutaa, ilagijangillu hitingnia hakugingningalu. Una aulavikhaq haffuman hulidjuhiit ikajuutigiangit aulavikhaq haffuman arlingnaqtumik alrujaq ilitturninga taimaa ihuaqhinnaqtuq ilitquhianit haffuman tarjum natia aturaaqtaakhaanit hakugiangnia haffuman alrujaq. Havaaq ikaarningit pitquhirijaat atuinnaqhugit nalunaijainingit hulidjuhiit tamainnut alrujaq ikaarningat uvanngat Japan uvunga Europe naahimalugu marluk avvautingillu ukiungat, atulaaqtangit hailijakhangit hilam hikungalu qanurinningit akhuuqtangit Ukiuqtaqtuq naahimalugu pingahut aujaq hilaqtitigut, 2022-2024. Nalunaijainiq aulattittijut aulapkailaaqtut uvani 24 nit ikaarnigut kigligutaanit, hilam tarjungillu qanurilinganingit pivluni, unalu nalunaijaijuq umiaq takukhauhunngujuq iliktirutaanit quillingillu uqaqhimajuq uvani Hilarjuatigut Maliktangit haffuman Ahijuqtailinahuarniq Tarjumi (COLREGS) Maliktangit 27, naunaiqhiilugillu nalunaijainiq umiaq iniqpiqhimajuq pilaaqhutik hanaqigiami. Naalakhimajut tautukhutik munarijauluni qautamaat uvani VHF Qunniarnaqtuq 16, unalu umiaq turaaqhimainnarniaqtangit hamna AIS naunaitkut. Aulapkaqhutik haffuman nalunaijainigut iningit qunniqaqtakhaat akunnganit uvani Qunniarnaqtuq 16 mi nalaumajumik havangnaqtut qunniarnaqtut tukiliuqhimajut Nalunaitkutat uvunga Imarmiutaujut.

Personnel

Personnel on site: 50

Days on site: 28

Total Person days: 1400

Operations Phase: from 2022-07-17 to 2024-10-16

Operations Phase: from 2022-07-17 to 2024-10-16

Post-Closure Phase: from to

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
waters of Northwest Passage	Marine Based Activities	Marine	Marine waters comprising part of Northern Canada's Northwest Passage between Beaufort Sea and Baffin Bay.	Traditional subsistence hunting and fishing waters of Canada Indigenous Peoples. Human occupation and use of the Tallurutiup Imanga region can be traced back to the Dorset (500 BC–1500 AD) and Thule (about 1000 AD until approximately 1500 AD) cultures that preceded the Inuit who live in the area today.	Cable route passes through portion of Tallurutiup Imanga National Marine Conservation Area.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Information is not available			

Authorizations

Indicate the areas in which the project is located:

Transboundary
Kitikmeot
North Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Information is not available				

Project transportation types

Transportation Type	Proposed Use	Length of Use
Water		

Project accomodation types

Other,

Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
marine survey vessel	1	approx. 75m	geophysical and geotechnical cable route survey

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Diesel	fuel	6	60	360	Cubic Meters	vessel main engine propulsion, shipboard generators

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0		

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Information is not available				

Environmental Impacts:

Survey vessel main engine and generator exhaust stack emissions to atmosphere. All engines to be maintained in good working order.

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: Rig****SECTION H1: Vessel Use****SECTION H2: Disposal At Sea****SECTION I1: Municipal Development****Description of Existing Environment: Physical Environment**

Canadian waters entering the Queen Elizabeth Islands from the west through McClure Strait, through Viscount Melville Sound, Barrow Strait and Lancaster Sound, then exiting into Baffin Bay

Description of Existing Environment: Biological Environment

The Tallurutiup Imanga region is a major east-west migratory corridor leading from Baffin Bay into the Arctic Archipelago and linking wintering and summering areas. Most species present are migratory and they all depend on this region as they move from one essential habitat to another. The area provides essential habitat for narwhal (up to 75% of the global population); beluga (20% of the Canadian population); polar bears (largest subpopulation in Canada); and several seabird species (some of the largest colonies in the Canadian Arctic).

Description of Existing Environment: Socio-economic Environment**Miscellaneous Project Information****Identification of Impacts and Proposed Mitigation Measures****Cumulative Effects**

Impacts

Identification of Environmental Impacts

PHYSICAL		SOCIO-ECONOMIC	
Designated environmental areas	Archaeological and cultural historic sites	Employment	Community wellness
-	-	-	-
Ground stability	Birds, including habitat and migration patterns	-	-
Permafrost	Aquatic species, incl. habitat and migration/spawning	-	-
Hydrology / Limnology	Wildlife protected areas	-	-
Water quality	Vegetation	-	-
Climate conditions	Tidal processes and bathymetry	-	-
Eskers and other unique or fragile landscapes	Sediment and soil quality	-	-
Surface and bedrock geology	Air quality	-	-
	Noise levels	-	-
BIOLOGICAL		Human health	
	Vegetation	-	-
	Wildlife, including habitat and migration patterns	-	-
	Birds, including habitat and migration patterns	-	-
	Aquatic species, incl. habitat and migration/spawning	-	-
	Wildlife protected areas	-	-
	Archaeological and cultural historic sites	-	-
	Employment	-	-
	Community wellness	-	-
	Community infrastructure	-	-
	Human health	-	-

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

1	polyline	waters of Northwest Passage
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