

NPC 150863: The Kivalliq-Baffin Connector Horizontal Directional Drilling Feasibility Study

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Proposal Status: Conformity Determination Issued

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[Project Overview](#)

Type of application: New

Proponent name:

Victoria Burdett-Coutts

Proponent company:

Government of Nunavut

Project Description:

ENGLISH The Government of Nunavut's Department of Transportation and Infrastructure Nunavut (GN-TIN) has been awarded funding by the Canadian Radio-television and Telecommunications Commission (CRTC) to support the construction of a 1,066 km fibre optic cable in southern Nunavut. The Kivalliq-Baffin Connector Project (the KBC Project) will connect four Nunavut communities to high-speed internet: Iqaluit, Kimmirut, and Kinngait on the southern coast of Baffin Island (Qikiqtani Region), and Salliq [Coral Harbour] on Southampton Island (Kivalliq Region). The KBC Project will connect to an existing Branching Unit (BU) in Salluit (Nunavik) built for the Kativik Regional Government's (KRG) Eastern Arctic Underwater Fibre Optic Network (EAUFON) Project (hereafter referred to as the KRG Project). Three of the Nunavut communities will be serviced through a marine approach (Kimmirut, Kinngait, Salliq [Coral Harbour]), with Iqaluit's approach being a terrestrial cable lay (from Kimmirut). Dynamic Ocean Consulting Ltd (Dynamic Ocean) has been retained by the GN-TIN as the regulatory specialist to support the permitting for KBC Project. This Project Description (PD) is specific to the Horizontal Directional Drilling (HDD) Engineering Support Program that is required at each of the marine landings. Worley Canada Services Ltd., operating as Worley Consulting has been retained by GN-TIN as the professional engineering company providing geophysical/geological expertise to support the HDD Engineering Support Program. The investigations that will be done to support the KBC HDD Engineering Support Program will be composed of the geophysical, topographical, geotechnical and potentially biological surveys as described below, which will occur on land and in the marine environment to encompass the areas required for HDD: •Geotechnical (Borehole drilling, thermistors). •Geophysical (Swath bathymetry (MBES), Side Scan Sonar (SSS), magnometer, Subbottom profiler (SBP), Multichannel Analysis of Surface Waves (MASW), Seismic Refraction, Electrical Resistivity Tomography (ERT), Downhole Optical Viewer (OTV) and/or Acoustic Viewer (ATV). •Topographical survey (LiDAR, Orthoimagery). •Biological survey (underwater video) (potential). The investigations noted above will take place in 2025 and 2026. Approximately 40 days are required in each community, and it is likely to occur over multiple deployments to maximize open water or iced ocean conditions. A crew of up to 10 people in each community is expected to be required. Whether the programs are

[illegible]

ՀՀ Արևմտահայաստանի մարզի Վերականգնողական ծրագրի շրջանակներում իրականացվող «ՀՀ Արևմտահայաստանի մարզի Վերականգնողական ծրագրի շրջանակներում իրականացվող «ՀՀ Արևմտահայաստանի մարզի Վերականգնողական ծրագրի շրջանակներում իրականացվող»

[Project Schedule](#)

Start Date:

2025-07-01

End Date:

2026-11-04

[Project Map](#)

List of project geometries:

Id

Geometry

Location Name

[18396](#)

point

Site_Kimmirut CLS

[18397](#)

point

Site_Kinngait CLS

[18398](#)

point

Site_Coral Harbor CLS

[18399](#)

point

HDD Punchout

[18400](#)

point

HDD Punchout

[18401](#)

point

HDD Punchout

NPC Planning regions:

No Approved Plan

Keewatin

[Project Land Use and Authorizations](#)

Project Land Use:

Marine-Based Activities

Scientific Research

Licensing Agencies:

Nunavut Impact Review Board

Nunavut Research Institute

Government of Canada - Fisheries and Oceans Canada

Government of Canada - Crown-Indigenous Relations and Northern Affairs Canada

Nunavut Water Board

Government of Canada - Transport Canada

Qikiqtani Inuit Association

Government of Nunavut - Community and Government Services

Kivalliq Inuit Association

[Material Use](#)

Equipment:

Type

Quantity

Type

Use

Multi-Beam Echosounder

1

1 m x 50 cm

Bathymetry with an approximately 200 m wide survey corridor along HDD alignment.

Side Scan Sonar

1

2 m x 50 cm

Seabed type / conditions along and perpendicular to HDD alignment.

Sub-bottom Profiler

1

1 m x 1 m

Ground conditions below seabed with an approximately 200 m wide survey corridor.

Magnetometer

1

2 m x 50 cm

Combined with side scan sonar to assess seabed morphology and submerged objects.

Airgun

1

0.9 m x 9.2 m

Seismic source for seismic refraction and Multi-channel Analysis of Surface Waves (MASW).

Seismic Refraction / MASW

1

100 m x 0.02 m

Seabed type / conditions along and perpendicular to HDD alignment.

CPT

1

2.5 m x 1.5 m

To support determination of simultaneous laying and burial of the cable.

Fuel Use:

Type

Container

Capacity

Use

No data found

Hazardous Material and Chemical Use:

Type

Container

Capacity

Use

No data found

Water Consumption:

Daily Amount (m²)

Retrieval Method

Retrieval Location

0

open ocean

desalination of ocean water

Waste and Impacts

Environmental Impacts:

Potential environmental impacts include disturbance to marine mammals and fish, disturbance to terrestrial wildlife and vegetation, accidental spill, and potential effects to water and air quality. All potential impacts are mitigatable, with strategies outline in Section 8 of the NPC Application Letter.

Waste Management:

Waste Type

Quantity Generated

Treatment Method

Disposal Method

No data found

