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December 31, 2024

**Re: 2024 Non-Technical Annual Report Grise Fiord and Resolute Bay Field Programs – Nunavut Research Institute Licence No. 02 045-24N-M**

## 1. Project Overview

### 1.1. Background

Worley Canada Services Ltd., operating as Worley Consulting (Worley), has been retained by the Government of Nunavut – Community & Government Services (GN-CGS) to support the detailed design of community harbour facilities in Grise Fiord (the Grise Fiord Community Harbour Project) and Resolute Bay (the Resolute Bay Harbour Community Harbour Project) in Nunavut. Dynamic Ocean Consulting Ltd (Dynamic Ocean) is supporting Worley on the permitting requirements for the Project. To inform the detailed design phase, field programs ran between August 22 to September 21, 2024, during the open-water season. The intention of the field programs, was as below:

- Conduct environmental, geoscience, geophysics, and archaeological baseline studies in each community.
- Perform a geotechnical program to confirm seabed and quarry rock conditions.
- Perform topographic and bathymetric surveys.
- Undertaken existing conditions or effects studies prior to construction of the Community Harbours.

Program permits obtained for the Field Program are provided in Table 1-1.

This letter provides the summary details for the 2024 field season to fulfill the annual requirements for the Nunavut Research Institute (NRI) post-Field Program reporting (license No. 02 045 24N-M). A renewal for 2025 is expected to be required to facilitate future field programs.

**Table 1-1: Field Program Permits**

Regulatory Authority	Permit Type	Permit / File No
Nunavut Planning Commission	Conformity Determination	150435
Nunavut Impact Review Board	Screening Decision Report	24YN030
Nunavut Research Institution	Research License	02 045 24N-M
Department of Fisheries and Oceans	License to Fish for Science	S-24/25-1071-NU
Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)	Land Use Permit (LUP)	N2024X0025 (Resolute) N2024X0026 (Grise)
Government of Nunavut – Department of Culture and Heritage	Class 2 Nunavut Territory Archaeologist Permit	2024-59A (Resolute) 2024-63A (Grise)

**1.2. Program Name**

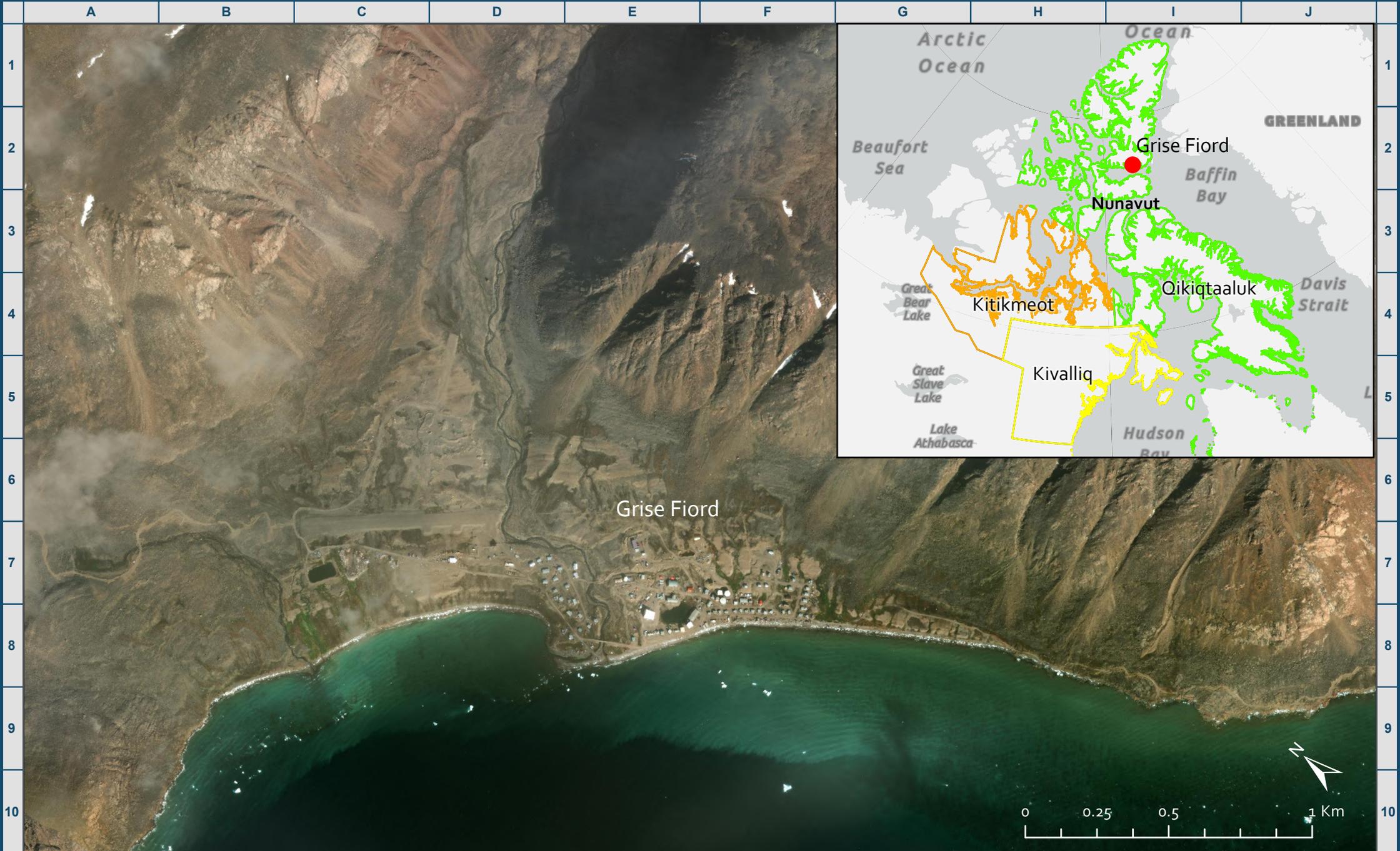
Grise Fiord and Resolute Bay Field Program’s (hereafter referred to as the Field Program).

**1.3. Program Location**

Grise Fiord and Resolute Bay are located on Ellesmere and Cornwallis Islands in the Qikiqtaaluk Region (see Table 1-2, Figure 1-1, Figure 1-2).

**Table 1-2: Field Program Location**

Location	Location Description	Latitude	Longitude
Grise Fiord	Located on the southern shore of Ellesmere Island in Jones Sound.	76° 25.001'N	82° 54.935'W
Resolute Bay	Located on the south shore of Cornwallis Island in Parry Channel.	74° 41.472'N	94° 51.549'W



Spatial Reference  
 Name: NAD 1983 CSRS UTM  
 Zone 17N  
 GCS: GCS North American 1983  
 CSRS  
 Projection: Transverse Mercator  
 Map Units: Meter

Figure 1-1: Grise Fiord, Nunavut Location

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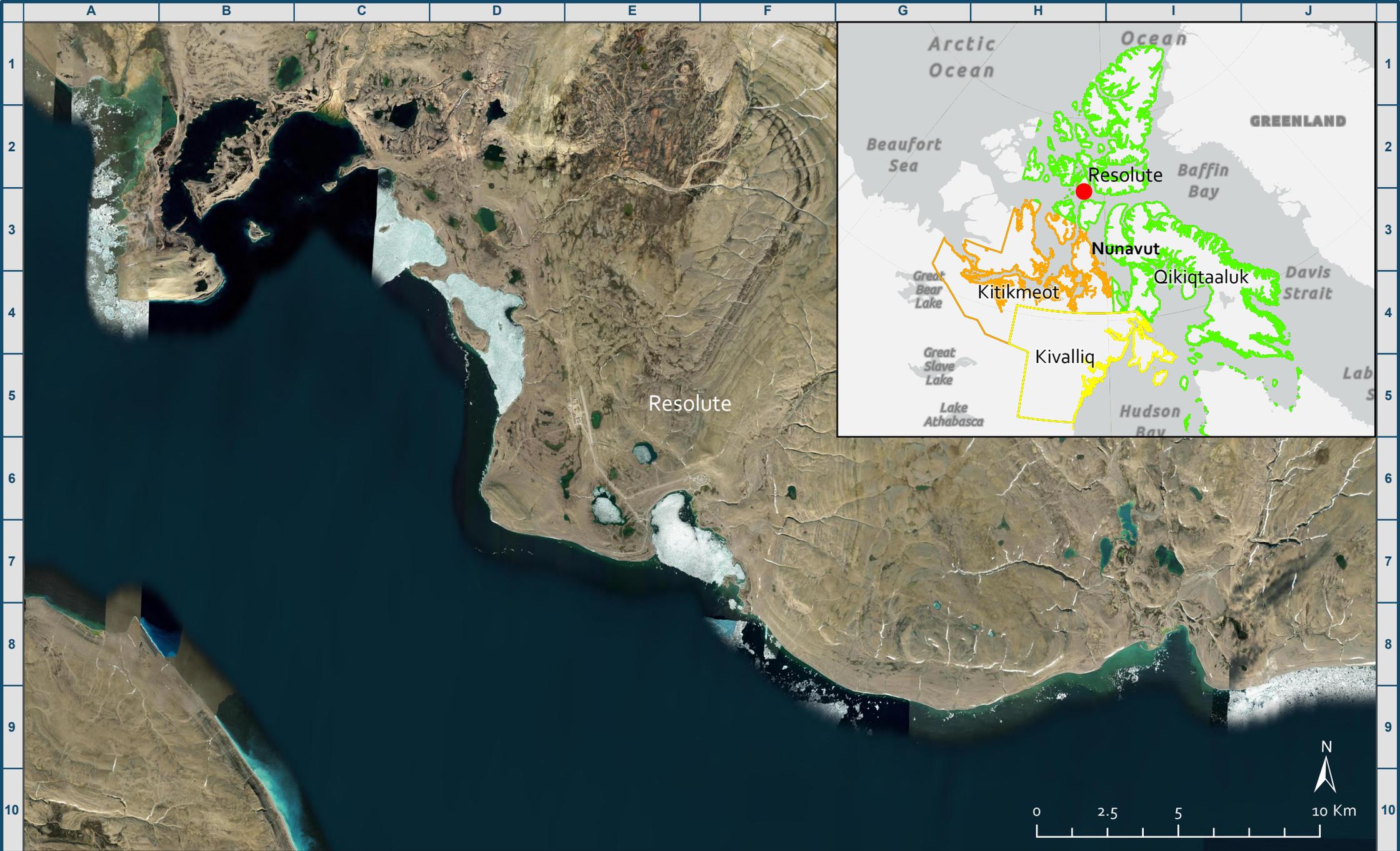
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Edited By: CK

Approved By: VBC

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Spatial Reference  
 Name: NAD 1983 CSRS UTM  
 Zone 15N  
 GCS: GCS North American 1983  
 CSRS  
 Projection: Transverse Mercator  
 Map Units: Meter

Figure 1-2: Resolute, Nunavut Location

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#### 1.4. Proponent and Representative Details

Contact information for the proponent and consultant are provided in Table 1-3.

**Table 1-3: Proponent and Contact Information**

Contact Category	Contact Details
<b>Proponent: Government of Nunavut</b>	
Primary Contact	Justin McDonell – Project Manager, Capital Projects
Address	PO Box 1000 Station 200 Community and Government Services Iqaluit, Nunavut X0A 0H0
Telephone / Fax	1-867-975-5114
Email	<a href="mailto:JMcDonell@gov.nu.ca">JMcDonell@gov.nu.ca</a>
<b>Consultant: Dynamic Ocean Consulting Ltd.</b>	
Name	Victoria Burdett-Coutts, MSc RPBio Senior Marine Scientist and Regulatory Professional
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## 2. Field Program

### 2.1. Program Scope

Several field surveys were conducted during the 2024 field season of the Field Program, including:

- Marine Field Study.
- Geophysics Field Study.
- Geological Survey.
- Geotechnical Field Study.
- Bathymetric Surveys.
- Topographic Surveys.
- Archaeological Field Study.

### 2.2. Study Areas

Study Areas for the Field Program components include footprints in both the marine and terrestrial environments split across the following areas:

- Quarry.
- Haul Road.



- Community Harbour.

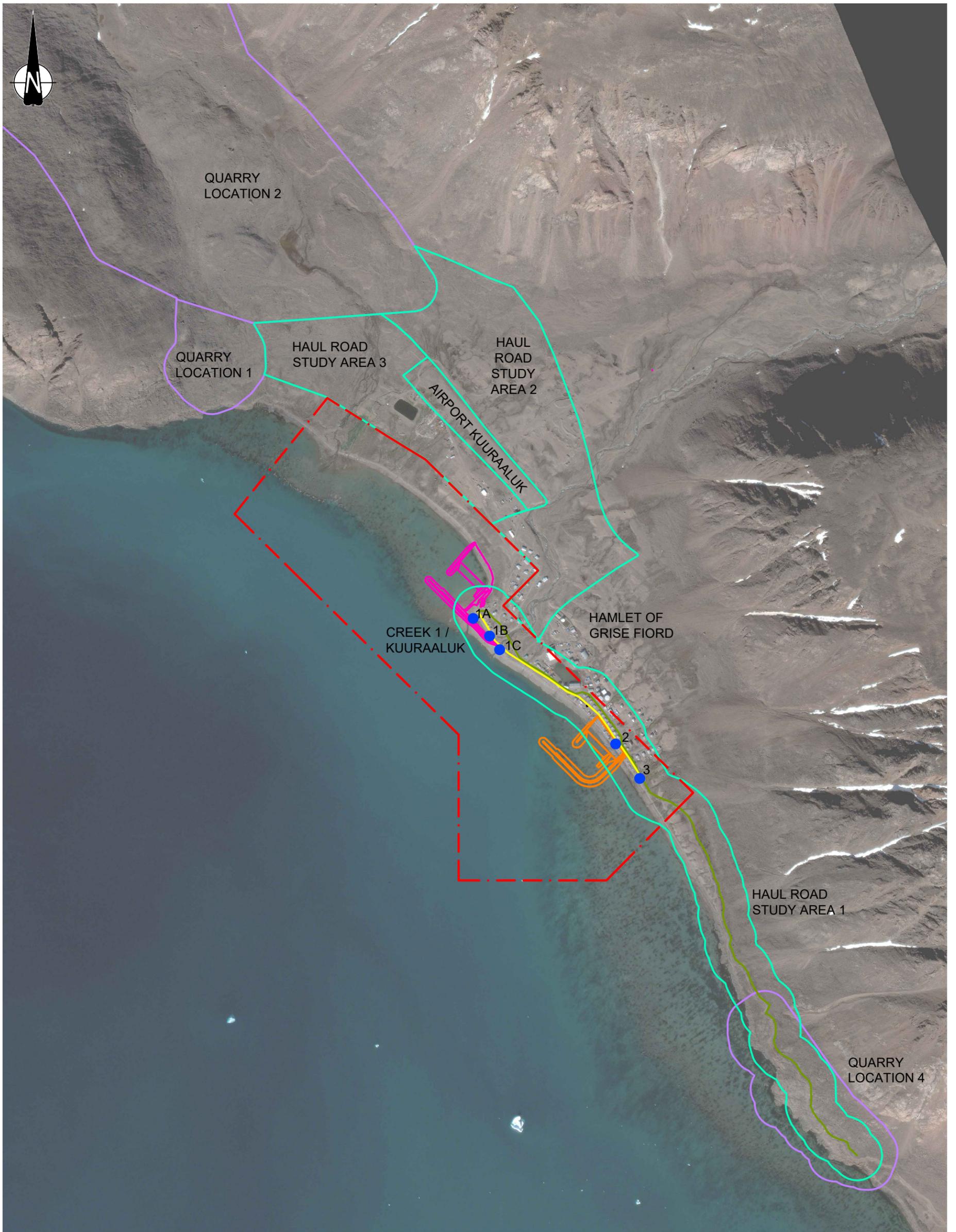
There is one location for each Community Harbour and there are one to two locations for each Haul Road and Quarry currently under consideration. The Study Areas assessed during the Field Program were:

- Grise Fiord - Community Harbour Option 1, Quarry Location 2, and Haul Road routing between the Quarry and the Community Harbour (see Figure 2-1).
- Resolute Bay - Community Harbour Option 2, Quarry Locations 1 and 2, and the Haul Road connecting each Quarry with the Community Harbour (see Figure 2-2).

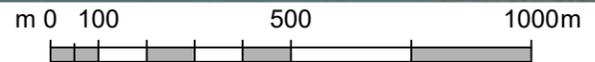
The Study Areas are collectively referred to as the Project Study Areas.

### 2.3. Field Program Methods

A summary of the methodology for each of the surveys undertaken during the Field Program is provided in Table 2-1.



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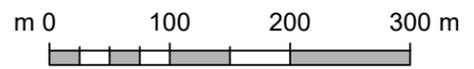
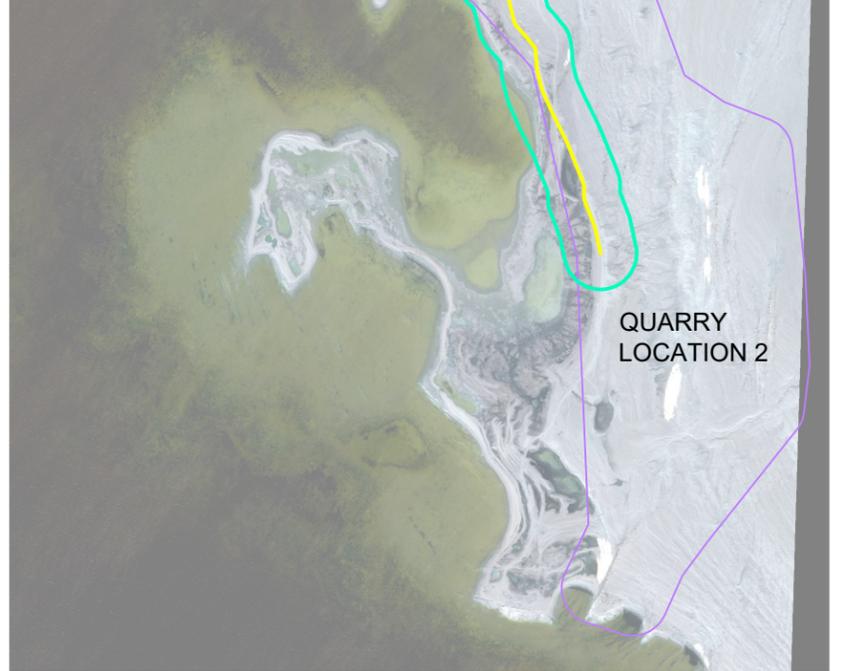
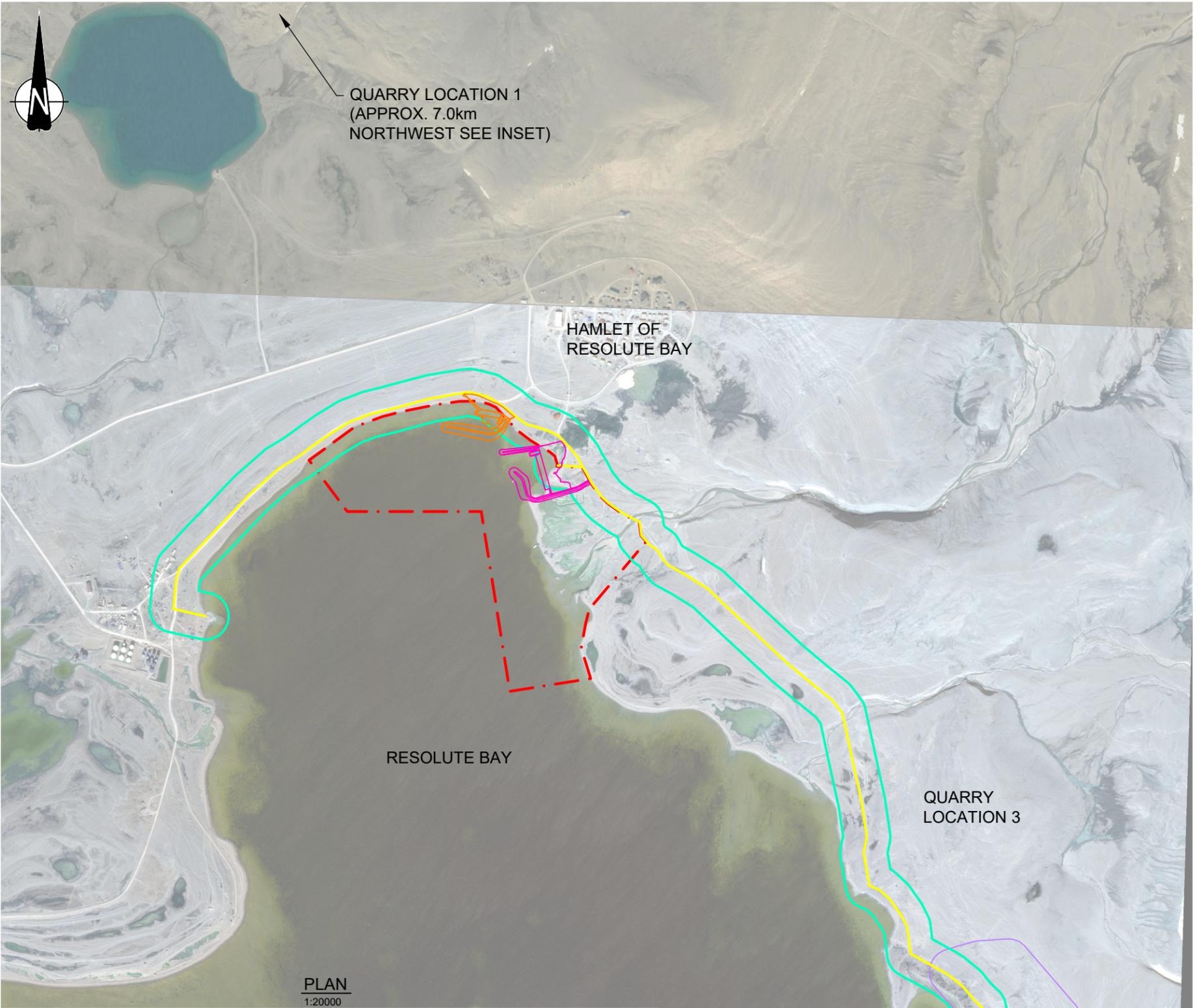


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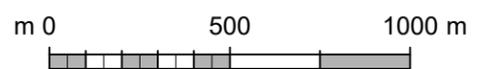
**LEGEND**

- |                            |                     |                   |                   |
|----------------------------|---------------------|-------------------|-------------------|
| <b>SCH FOOTPRINT</b>       |                     | <b>STUDY AREA</b> |                   |
|                            | OPTION 1            |                   | COMMUNITY HARBOUR |
|                            | OPTION 2            |                   | HAUL ROAD         |
| <b>POTENTIAL HAUL ROAD</b> |                     |                   | QUARRY            |
|                            | EXISTING ROAD/TRACK |                   |                   |
|                            | NEW HAUL ROAD       |                   |                   |
| <b>WATERWAY</b>            |                     |                   |                   |
|                            | FRESH WATER CREEK   |                   |                   |

GOVERNMENT OF NUNAVUT GRISE FIORD COMMUNITY HARBOUR DEVELOPMENT ENVIRONMENTAL AND SOCIO-ECONOMIC BASELINE SURVEY			
<b>PROJECT COMPONENTS AND STUDY AREAS                  (QUARRY, HAUL ROAD, COMMUNITY HARBOUR)</b>			
Date: 16-MAY-24	Drawn by: JLC	Edited by: JLC	App'd by: VB
		Worley Project Number 317086-54170	
		DRG No Figure 2-1	REV <b>B</b>
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**LEGEND**

**SCH FOOTPRINT**

- OPTION 1
- OPTION 2

**POTENTIAL HAUL ROAD**

- NEW HAUL ROAD

**STUDY AREA**

- COMMUNITY HARBOUR
- HAUL ROAD
- QUARRY

GOVERNMENT OF NUNAVUT  
 RESOLUTE BAY COMMUNITY HARBOUR DEVELOPMENT  
 ENVIRONMENTAL AND SOCIO-ECONOMIC BASELINE SURVEY

**PROJECT COMPONENTS AND STUDY AREAS  
 (QUARRY, HAUL ROAD, COMMUNITY HARBOUR)**



Date: 16-MAY-24 Drawn by: JLC Edited by: JLC App'd by: VB



Worley Project Number  
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**Table 2-1: Methodology for the Field Program**

Survey	Study	Survey Purpose	Field Methodology	Equipment Required	Transportation Mode	Program Study Area
Marine	Fish and Fish Habitat - Intertidal	A survey of the foreshore including the intertidal and subtidal areas was conducted to confirm the fish habitat quality within the footprint of the proposed Community Harbour.	<ul style="list-style-type: none"> <li>Intertidal surveys were conducted at low tide to maximize the extent of seabed exposed.</li> <li>Transects were perpendicular to shore within the Community Harbour Study Area (impacted site) and outside the Community Harbour footprint (control site).</li> <li>A 0.5 m<sup>2</sup> quadrat was spaced equidistantly along the transect line.</li> <li>Data collection included substrate type and composition, algae species identification, and relative abundance of marine invertebrates.</li> </ul>	Transect line, quadrat, iPad, clinometer	On foot	Community Harbour
	Fish and Fish Habitat - Subtidal		<ul style="list-style-type: none"> <li>Perpendicular and parallel to shore subtidal transects were conducted using a Blue Robotics Remotely Operated Vehicle (ROV).</li> <li>Data collection included substrate type and composition, algae species identification, and relative abundance of marine invertebrates.</li> </ul>	ROV, iPad, depth sounder	Boat	Community Harbour
	Plankton	A plankton survey was undertaken in the subtidal areas to confirm species diversity.	<ul style="list-style-type: none"> <li>Plankton surveys were conducted with a 200 µm, 1 m wide and 1 m long mesh net, which was towed from a boat travelling at 1 to 1.5 knots in a straight line for five minutes. A float was attached to the plankton net ring to ensure that the net remained at 2 m depth consistently.</li> <li>Field personnel collected plankton samples and stored them in 95% ethanol to preserve samples for species diversity analysis.</li> </ul>	Plankton net	Boat	Community Harbour
	Water Quality	Physicochemical parameters measured at the sites included temperature, salinity, pH, turbidity and conductivity, as an assessment of water quality.	<ul style="list-style-type: none"> <li>A YSI was used to measure physicochemical parameter at each location.</li> </ul>	YSI	Boat	Community Harbour
	Drogue	Collection of surface current data was required to characterize surface current patterns within the relevant Study Area(s).	<ul style="list-style-type: none"> <li>The drogue was deployed in multiple locations during a flood tide and an ebb tide.</li> <li>The position of the drogue was recorded using an Automatic Identification System (AIS) attached to the drogue.</li> </ul>	Drogue, AIS	Boat	Community Harbour
Geophysical	Quarry (Grise Fiord)	A Seismic refraction survey was undertaken to inform engineers on the thickness of surficial deposits overlying rock at a potential quarry location	<ul style="list-style-type: none"> <li>Surveys were performed to thickness of surficial deposits overlying rock to support volume assessments of potential aggregates.</li> <li>Seismic refraction was carried out using a Geometric Geode 24 channel, signal enhancement seismograph and Oyo Geospace 10 Hz hydrophones and geophones.</li> </ul>	Seismograph, hydrophones, cable	On foot, vehicle	Quarry
	Community Harbour (Grise Fiord)	A Multi-channel Analysis of Surface Waves (MASW) survey was undertaken to inform engineers of depth and substrate type.	<ul style="list-style-type: none"> <li>Surveys were performed to identify changes in bottom hardness (and to locate bedrock) and to form the basis for recommending locations for future geotechnical drilling programs.</li> </ul>	Seismograph, hydrophones, submersible hydro cable	Boat	Community Harbour

Survey	Study	Survey Purpose	Field Methodology	Equipment Required	Transportation Mode	Program Study Area
			<ul style="list-style-type: none"> <li>MASW profiling was carried out using a Geometric Geode 24 channel, signal enhancement seismograph and Oyo Geospace 10 Hz hydrophones and geophones.</li> </ul>			
Geotechnical	Quarry, Haul Road	A geotechnical survey was required to identify suitable quarry locations for sourcing the required fill and rock armour for the Community Harbour construction.	<ul style="list-style-type: none"> <li>A visual assessment of exposed bedrock and/or surficial deposits (moraines) and noting rock and/or soil type, major structural defects and/or rock dimensions, weathering and field estimate of rock strength.</li> <li>Potential quarry locations and delineate possible quarry extents were tagged. This information may inform future environmental studies.</li> <li>Soil and/or rock samples were collected at locations identified as potential rock sources and sent to a laboratory for strength and durability testing.</li> </ul>	Geotechnical hammer, tape measure, hand lens	On foot, vehicle or ATV	Quarry, Haul Road
	Community Harbour	A geotechnical subsurface drilling program was performed to understand the type and variability of subsurface soil and/or rock conditions underlying the proposed Community Harbour.	<ul style="list-style-type: none"> <li>A track mounted rotary drill rig (CME45 and CME55) was used to advance boreholes. The drill rig was moved to / from each location on tracks.</li> <li>Boreholes were advanced using water rotary techniques with the borehole diameter approximately 100 mm.</li> <li>Samples were collected at approximately 1.5 m intervals starting from the ground / seabed surface until rock was encountered and/or terminated in surficial soils.</li> <li>Drilling method was switched to double tube HQ diamond drilling techniques to obtain soil / rock core samples.</li> </ul>	Track Mounted Rotary Drill Rig (Drill Model: CME 45 and CME55)	Track, Low-bed, Truck, Foot	Community Harbour, Quarry (Resolute)
Bathymetric	Community Harbour	Bathymetric survey conducted to determine water depth and confirm Chart Datum (CD).	<ul style="list-style-type: none"> <li>Conducted using multi-beam and GPS positioning system fixed on a boat. Tidal elevations res / tidal gauges.</li> </ul>	Multi-beam survey equipment, GPS, RTK, pressure sensor	Boat	Community Harbour
Topographic Survey	Community Harbour, Quarry, Haul Road	Topographic and feature survey.	<ul style="list-style-type: none"> <li>Topographical conducted using standard surveying techniques and Unmanned Aerial Vehicles (UAVs).</li> </ul>	Survey Equipment and UAVs	Foot, UAV	Community Harbour (land portion), Quarry, Haul Road
Archaeological	Community Harbour (land portion), Quarry, Haul Road	An Archaeological Impact Assessment (AIA) was conducted	<ul style="list-style-type: none"> <li>A Class II Nunavut Archaeologist Permit application was acquired by AECOM.</li> <li>The AIA of the Project included pedestrian survey of the proposed Study Areas (s) and targeted undisturbed areas.</li> <li>Using a transect based survey method, a visual inspection of all existing exposures, systematic and judgmental shovel testing of areas lacking exposure but with archaeological potential. All shovel tests (positive and negative) were recorded using a GPS and all sites were mapped, sketched and photographed.</li> <li>Recovered artifacts were cleaned, catalogued, identified, inventoried, and descriptions of each will be present in the final project report.</li> </ul>		Foot	Community Harbour (land portion), Quarry, Haul Road

## 2.4. Field Activities Summary

Results of the Field Program are summarized in this section. Further details can be provided to interested parties upon request and with approval from the GN-CGS. A summary of the Field Program results will be shared with the relevant communities through ongoing consultation for the projects.

### 2.4.1. Marine Field Survey

The Marine Field Survey consisted of the following:

- Fish and fish habitat.
- Plankton.
- Water quality.
- Drogue.

#### 2.4.1.1 Fish and Fish Habitat

Quantitative surveys were undertaken from August 27 to 29 and September 3 to 6, 2024 to characterize the seabed conditions of the intertidal and subtidal habitats within the Harbour Study Area of Resolute Bay and Grise Fiord, respectively. Freshwater habitats, when present in proximity to the proposed Harbour Study Area were documented qualitatively.

##### 2.4.1.1.1 Grise Fiord

The Community Harbour Study Area exhibited low habitat quality in the intertidal area. The exposed tidal area ranged from 23.5 m to 182 m in length where a single habitat band was observed. Trace amounts of marine vegetation were observed within the intertidal zone with substrate characteristics predominantly gravel with mixtures of boulder, cobble and sand. Amphipod presence was noted twice within granular substrate habitats.

The subtidal area displayed low to moderate quality habitat quality. Marine vegetation in the subtidal zone was trace to moderate in density where hard substrates (e.g., boulder, cobble or gravel) were dominant. Rockweed (*Fucus sp.*), sugar kelp (*Saccharina latissima*) and clumped brown algae were observed the most across the Community Harbour Study Area coinciding frequently with boulder and cobble presence. Invertebrate observations were trace across the subtidal zone. The highest occurrence of invertebrate species were the jelly species and green sea urchin (*Strongylocentrotus droebachiensis*); observed in trace amounts within loose and granular substrate habitats (cobble, gravel or sand). Six sculpin (*Myoxocephalus sp.*) were documented within the subtidal survey area.

##### 2.4.1.1.2 Resolute Bay

The exposed tidal area ranged from 5.5 m to 8.3 m in length with a single habitat band observed. The intertidal zone of the Community Harbour Study Area was predominantly gravel interspersed with cobble and occasionally sand. Marine vegetation was not observed within the intertidal zone of the study area.

The subtidal zone of the Community Harbour Study Area was predominantly sand with some cobble, shell hash and boulder. Marine vegetation ranged from trace to moderate abundance. The most observed species were sugar kelp, brown filamentous algae and rockweed, which were found predominantly in loose granular substrates such as sand, cobble and shell hash. Invertebrate species were documented in trace amounts while the predominant occurrence was of truncated soft-shell clam

and comb jelly species. Both species were found in all substrate types except gravel. During the subtidal surveys minimal fish species were observed, with one large school of transient juvenile arctic cod (*Boreogadus saida*).

#### 2.4.1.2 Invertebrate Collections

Sixty amphipods were collected from Grise Fiord to inform a genetic identification and food chain dynamics study. Amphipods were collected during intertidal surveys and were stored in ethanol for transport back to Vancouver, BC for further processing.

Results of the DNA analysis and food chain dynamics study are not available at the time of this report.

#### 2.4.1.3 Plankton

During the Field Program plankton samples were collected at 12 sites from each community resulting in 32 samples. These samples were sent for visual identification and genetic sampling at the University of British Columbia (UBC). Results are not available at the time of this report.

#### 2.4.1.4 Water Quality

Two sampling events were undertaken across six sites in each community to assess pH, temperature, conductivity, and turbidity using a YSI Pro4 DSS. Water quality samples were collected using the methodologies outlined in the NRI application for the Field Program. Samples were taken within the Community Harbour Study Areas of Grise Fiord and Resolute Bay.

Grise Fiord temperature patterns were uniform across all six sites, ranging from  $-1.5^{\circ}\text{C}$  at  $-100\text{ m}$  depth to  $2.0^{\circ}\text{C}$  at the surface. Turbidity levels were uniform for event 1 ( $0.2\text{ NTU}$  from  $-100\text{ m}$  to  $0\text{ m}$ ) but then during event 2 sites 1 and 2 showed increased levels of turbidity ( $0.2\text{ NTU}$  at  $-100\text{ m}$  to  $3.2\text{ NTU}$  at  $0\text{ m}$ ). The pH across all sites and events ranged between  $8.1$  to  $9.1$ . Conductivity was generally uniform across all sites and events.

Resolute Bay temperature patterns were uniform across all six sites, ranging from  $-0.7^{\circ}\text{C}$  at  $-25\text{ m}$  depth to  $0.5^{\circ}\text{C}$  at the surface. Turbidity levels were mostly uniform across both events ( $0.5\text{ NTU}$  from surface to  $-25\text{ m}$  depth). Three outliers were recorded: event 1 site 2,  $0.5\text{ NTU}$   $-7\text{ m}$  to  $2.5\text{ NTU}$   $-2\text{ m}$ ; event 2 site 5,  $1.8\text{ NTU}$  at  $-22\text{ m}$  to  $3.0\text{ NTU}$  at  $-6\text{ m}$ ; and event 2 site 6,  $1.8\text{ NTU}$  at  $-19\text{ m}$  to  $3.0\text{ NTU}$  at  $-6\text{ m}$ . The pH across all sites and events ranged between  $7.9$  to  $8.3$  with each site having consistent pH from  $-25\text{ m}$  to the surface. Conductivity was generally uniform across all sites and events.

#### 2.4.1.5 Drogue

Surface current data was collected using a drogue (a surface float with a GPS tracker). The surface float was set up with an AIS transponder, which enabled it to be tracked throughout the day so that its location was known for retrieval. Surface current data was required to characterize surface current patterns within the vicinity of the Community Harbour Study Area.

### 2.4.2. Geophysical Field Survey

Overwater Multichannel Analysis of Surface Waves (MASW) method employs dispersion curve analysis of the Rayleigh or Surface Wave response to reliably determine the shear wave velocity distributions in the subsurface. Field procedures involve deploying hydrophones and cable in a straight line along the

seabed with a vessel and shooting multiple points within and off the ends of each cable. The seismic source is operated at each shotpoint and recorded.

An MASW survey was undertaken to aid in assessing sub surface materials within the footprint of the proposed Community Harbour at Grise Fiord. Survey methodology is available in the NRI application. The survey included a multi-beam bathymetric survey and MASW.

The geophysical data is currently being assessed and results not available at the time of this report.

#### 2.4.3. Geological Survey

A geological survey was required to identify potential quarry locations for sourcing the required fill and rock armour for the proposed Community Harbour construction. The survey consisted of a visual assessment of exposed bedrock (Resolute Bay) and bedrock / surficial deposits (Grise Fiord) and noting rock and/or soil type, major structural defects, soil particle size, weathering and field estimate of rock strength. The geologist tagged potential quarry locations and delineated possible quarry extents. This information was also collected to inform future environmental studies. Representative rock samples were collected at locations which were identified as potential for source rock. The rock samples were sent to a laboratory for screening level Acid Rock Drainage (ARD), strength and durability testing. Several quarry options were considered in each community that ranged from 1.5 km to 4.0 km from the communities.

Laboratory testing is currently underway at the time of this report.

#### 2.4.4. Geotechnical Drilling

The drill rigs chosen to undertake drilling was a CME45 and CME55, which were shipped to Resolute Bay and Grise Fiord, respectively via sealift.

A total of three boreholes were advanced in Grise Fiord and five boreholes advanced in Resolute Bay by Nova Drilling, under the direct supervision of Worley. Boreholes in Grise Fiord were advanced 7.9 m to 9.1 metres below ground surface or seabed (mbgs or mbsb). Three boreholes in Resolute Bay were advanced 4.8 mbgs to 6.5 mbgs at the proposed Community Harbour, and two boreholes between 6.0 m to 7.5 m at the proposed quarry locations.

Drilling operations were undertaken 12 hours per day during dayshift for the duration of the drilling program. Borehole logs are available upon request.

#### 2.4.5. Topographical Drone Survey

Topographic surveys were completed at the proposed Community Harbour boundary to identify local features, buildings, properties and drainage patterns that might affect the design. Surveys included high water marks to understand shoreline changes over previous years.

The mapping flight missions parameters; front and side image overlap, flight altitude, flight speed, camera settings, etc. were set to optimize image quality, orthomosaic photo resolution, and 3D point cloud generation. These parameters would change for each site depending mainly on lighting, weather conditions, and flight mission area. The flights would normally be timed to match the low tide when possible. A series of panoramic flight missions were created for each site over areas of interest. Image georeferencing was done by deploying a series of mesh targets, commonly known as ground control points (GCPs), evenly across the mapping flight mission area at around 200 m spacing when possible. For

each site, a sample of ground truthing measurements were taken with the survey equipment over the mapping flight mission area. The elevations for these measurements were compared to the generated 3D point cloud for quality control.

#### 2.4.6. Archaeological Field Survey

Archaeological Impact Assessments (AIA) were completed in each community (see Table 1-1 for respective permits). The objectives of the AIAs were to inventory and record archaeological resource sites within each of the Project Study Areas and to assess their potential impacts by construction of the Community Harbours. Archaeologists interpret the significance of a site based on an understanding of the landscape, the relationship between archaeological sites, and in some cases the relationships between occupations within a single site. Therefore, removal or mixing of cultural material or sites negatively affects their interpretative value. Methodology used for the AIA survey is provided in the NPC and NRI applications.

A summary report and an AIA was completed by AECOM Canada Ltd. (AECOM) on behalf of Worley. In Grise Fiord, no archaeological sites were recorded within the Project Study Areas. In Resolute Bay, the AIA resulted in recording four archaeological sites. Five sites previously recorded in a 2019 survey were also revisited. Of these nine sites, three are within 50 m of the planned impacts, and an additional two will be impacted if Quarry Location 2 is used. Because these sites may be impacted by the construction of the proposed Community Harbour, further study is required during the detailed design and permitting phase.

#### 2.5. Inuit Quajimajatuqanjit and Community Consultation

In addition to the above Field Program, communities were engaged during planning and Field Program activities. Early engagement with the communities, prior to the Field Program, allowed for a collaborative approach between the field team and community members during the field activities including local knowledge sharing and coordinating local resources for personnel and equipment.

Inuit Quajimajatuqanjit (IQ) was gathered through: desktop review; design workshops with board members from the Iviq Hunters and Trappers' Organization (HTO) in Grise Fiord, Resolute Bay Hunters and Trappers' Association (HTA), and the Nauttiqsuqtiit (Guardians) in both communities; and, IQ workshops with local knowledge holders to identify existing conditions of important environmental and socio-economic resources in and around each of the communities.

Key knowledge holders were identified by the IHTO and HTA. Participants included elders and active land users. In advance of the workshops, the IQ facilitator engaged with the various discipline leads to confirm the information required for each component.

Verification workshops will be conducted in December 2024 to discuss the Field Program results and verify that IQ has been accurately and appropriately presented in the study.

The following is a summary of the Community Consultation and IQ program conducted to date:

- Grise Fiord IQ workshop with local knowledge holders: August 6, 2024.
- Grise Fiord Hamlet Council, IHTO meeting, and Nauttiqsuqtiit design meeting: August 6, 2024.
- Resolute Bay Hamlet council meeting: August 7, 2024.
- Resolute HTA and Nauttiqsuqtiit design meeting: August 8, 2024.

- Resolute Bay IQ interviews with local knowledge holders: August 8, 2024.

Local interpreters were hired as required to support workshops and interviews. Before the start of the IQ workshops and interviews, knowledge holders were asked to read a project information sheet and consent form and then complete and sign the form before the start of the IQ workshops. The consent form was provided in English and Inuktitut and described the workshop's objectives, methods, and uses for the information, allowed the knowledge holder to specify where a copy of the transcript and map should be sent, and whether the knowledge holder wished to be acknowledged by name for their contribution.

To better understand the potential interactions between harvesting rights and anticipated Project activities, discussions during the workshops and interviews focused on harvest locations, water and ice access, fishing, marine and land mammals, birds and other wildlife and the potential locations of the proposed Community Harbour, Quarry and Haul Roads in relation to land use activities (e.g. fishing, hunting, gathering and trapping).

Land use and areas of cultural or ecological value were marked on maps and later digitized. Maps will be verified by knowledge holders in December 2024 to confirm that the information gathered during the IQ program was interpreted and presented in the intended manner. IQ has been joined with results from the Field Program to allow the Project team, in collaboration with community members, to make informed decisions on the design and construction planning of the proposed harbours that reflect the communities' needs, priorities and values.

### 3. 2025 Field Program

Field programs for 2025 will include a geotechnical drilling program planned to occur in spring 2025 during the iced season. Additional marine or terrestrial field programs may be required in 2025 to support project permitting requirements.

### 4. Summary and Closing

We trust this letter provides necessary details required for our annual summary. Any data collected over the course of this program will be available upon request for interested parties. If you require any further information, please do not hesitate to contact Victoria Burdett-Coutts (victoria@dynamicocean.ca; 778-839-2372).



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