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| Type de demande : | New |
| Type de projet: | Scientific Research |
| Date de la demande : | 6/17/2024 11:45:42 AM |
| Period of operation: | from 2024-06-27 to 2025-05-28 |
| Promoteur du projet: | Justin Government of Nunavut PO Box 1000 Stn 620 Iqaluit Nunavut (NU) X0A 0H0 Canada Téléphone :: 867-975-5441, Télécopieur :: |

DÉTAILS

Description non technique de la proposition de projet

Anglais: Worley Canada Services Ltd., operating as Worley Consulting, 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 and Resolute Bay in Nunavut. To inform the detailed design phase, several field programs will be undertaken over the next few years, initiating in the 2024 open-water season. This Project Description (PD) is specific to the field programs. The intention of the field programs, will be as below: •Conduct environmental, geoscience, geophysics, and archaeological baseline studies in each location. •Perform a geotechnical program to confirm seabed and quarry rock conditions. •Topographic and bathymetric surveys. •Existing conditions or effects studies during or post-construction of the CH's. Surveys will be conducted in two Study Areas: the Community Harbour and the Haul Road and Quarry. Maps depicting the Study Areas for each community are provided in Appendix A, Figure A-1 and Figure A-2 in the attached Application Letter. Field programs will largely be undertaken in open-water seasons, with the exception of the Geotech Drilling Program which may occur during the iced ocean condition. The initial 2024 existing conditions field program will be undertaken between July and September. Consultations on the Community Harbour facilities have been ongoing since the feasibility phase and have included six separate community visits from 2018 to 2022 to conduct meetings with the Hamlet, design workshops with the Hunters and Trappers Associations/Organizations (HTAs/HTOs), Inuit knowledge (Inuit Qaujimajatuqangit [IQ]) workshops with elders and active hunters, and community open houses. Meaningful consultation will be continued throughout the 'life cycle' of the Projects, including during the design and construction phases so that issues of concern can be identified and responded to in a timely manner and design and construction planning can be adjusted where possible to avoid and mitigate any adverse social or environmental effects. The next round of consultations is being planned for July 2024, before any field programs, and will focus on providing the communities with a Project update and general overview, confirming preferred options for the Community Harbour layouts, Quarries, and Haul Roads and discussing the field program activities including coordinating with the community for local support of workers and equipment for the field programs.

Français: NA

[illegible]

Inuinnaqtun: NA

Operations Phase: from 2024-06-27 to 2025-05-28

Activités

| Emplacement | Type d'activité | Statut des terres | Historique du site | Site à valeur archéologique ou paléontologique | Proximité des collectivités les plus proches et de toute zone protégée |
|---|--|-------------------|--|---|---|
| General location for Grise Fiord, located on the southern shore of Ellesmere Island in Jones Sound. | Scientific/International Polar Year Research | Municipal | Project area is an established longstanding community. | Archaeological field study is a component of the field program. | Community harbour located along 1.4 km of shoreline directly fronting the Grise Fiord community. Haul road: 14 km north of community. Quarry: 3 quarries of varying size. |
| General location for Resolute Bay, located on the south shore of Conwallis Island in Parry Channel. | Scientific/International Polar Year Research | Municipal | Project area is an established longstanding community. | Archaeological field study is a component of the field program. | Community harbour (CH) 1: 500 m along shoreline SW of the Resolute Bay community. CH 2: 1 km along shoreline fronting the community. Haul road: 3.3 km SE of CH 1 & 1.3 km SE of CH 2. Quarry 1: 7 km NW of CH study area. Quarry 2: 3.3 km SE of CH study area. Quarry 3: 1.7 km SE of CH study area |

Engagement de la collectivité et avantages pour la région

| Collectivité | Nom | Organisme | Date de la prise de contact |
|--------------|----------------------|---|-----------------------------|
| Grise Fiord | Amon Akeeagok | Iviq Hunters and Trappers' Organization | 2024-05-27 |
| Grise Fiord | Meeka Kigukta, Mayor | Hamlet of Grise Fiord | 2024-05-27 |
| Resolute Bay | Aziz, Mayor | Hamlet of Resolute Bay | 2024-06-18 |

| | | | |
|--------------|-------|---|------------|
| Resolute Bay | Nancy | Resolute Bay Hunters and Trappers' Organization | 2024-06-18 |
|--------------|-------|---|------------|

Autorisations

Indiquez les zones dans lesquelles le projet est situé:

Autorisations

| Organisme de régulation | Description des autorisations | État actuel | Date de l'émission/de la demande | Date d'échéance |
|---|---|-----------------|----------------------------------|-----------------|
| Institut de recherche du Nunavut | Research Permit | Not Yet Applied | | |
| Indigenous and Northern Affairs Canada | Land Use Permit | Not Yet Applied | | |
| Gouvernement du Nunavut, Services communautaires et gouvernementaux | Land Use Permit- to be confirmed if required. | Not Yet Applied | | |
| Pêches et Océans Canada | License to Fish for Scientific Purposes | Not Yet Applied | | |
| Gouvernement du Nunavut, ministère de l'Environnement | Wildlife Research Permit | Not Yet Applied | | |
| Gouvernement du Nunavut, ministère de l'Environnement | Vegetation (wildlife) export permit. (Local conservation officer) | Not Yet Applied | | |
| Government of Nunavut, Department of Culture, Language, Elders, and Youth | Class 2 Permit | Not Yet Applied | | |

Project transportation types

| Transportation Type | Utilisation proposée | Length of Use |
|---------------------|---|---------------|
| Air | field crews will travel to the project area by plane from Vancouver | |
| Land | field crews will travel by foot or local truck within the communities | |

Project accomodation types

Collectivité

Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

| Type d'équipement | Quantité | Taille – Dimensions | Utilisation proposée |
|--------------------------|----------|---------------------|--|
| Equipment | 1 | 1 | A variety of equipment will be required to undertake the planned Field Program. Please refer to Table 3-1 of the provided Application Letter which summarizes the equipment required for each of the Field Program components. Equipment may include small manual hand tools, iPads, transect line and quadrats, survey equipment such as remotely operated vehicles (ROVs) and unmanned aerial vehicles (UAVs), multi-beam survey equipment, and a track/skit mounted rotary drill rig. |
| Transportation Equipment | 1 | 1 | A variety of transportation equipment may be required, such as ATVs, vehicles, and boats. Transportation equipment required is provided in Table 3-1 of the provided Application Letter. |

Décrivez l'utilisation du carburant et des marchandises dangereuses

| Décrivez l'utilisation de carburant : | Type de carburant | Nombre de conteneurs | Capacité du conteneur | Quantité totale | Unités | Utilisation proposée |
|---------------------------------------|-------------------|----------------------|-----------------------|-----------------|--------|--|
| Sample Preservative | hazardous | 1 | 1 | 1 | Liters | Preservatives such as formalin, ethanol, and hydrochloric acid are required to preserve water and sediment quality samples for the marine-based Field Program components. Less than 1 millilitre of preservative will be required per sample bottle. |

Consommation d'eau

| Quantité quotidienne (m3) | Méthodes de récupération de l'eau proposées | Emplacement de récupération de l'eau proposé |
|---------------------------|---|--|
| 0 | | |

Déchets

Gestion des déchets

| Activités du projet | Type des déchets | Quantité prévue | Méthode d'élimination | Procédures de traitement supplémentaires |
|--|----------------------------------|--------------------------------|------------------------------|--|
| Scientific/International Polar Year Research | Déchets non combustibles | limited amount (no bulk waste) | a 'pack in, pack out' policy | none required |
| Scientific/International Polar Year Research | Eaux usées (matières de vidange) | limited/ regular amount | use existing facilities. | none required |

Répercussions environnementales :

Environmental impacts associated with the field programs are expected to be minimal. Potential impacts to terrestrial and marine habitat and wildlife may occur, however, all personnel will be accompanied by a local field assistant to confirm minimal disturbances. Minor disruptions to traditional land use may occur in the proposed study area, however, arrival of the research team will be advertised on local social media prior to arrival. There may be temporary sediment suspension in marine habitats due to grab sampling but the footprint of this activity is small and sediment disturbance will be minimal. Disturbance to heritage resources is possible, but unlikely. Measure to mitigate impacts are described in the Class 2 archaeological permit which was submitted to the C&H department. There will be an increase in anthropogenic presence in the Study Area but the research team is relatively small and are conducting non-invasive short term studies. Please see attached application letter Table 10-1.

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

N/A

SECTION D2: Facility Construction

N/A

SECTION D3: Facility Operation

N/A

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

There will be a small vessel used for fish habitat, water quality, sediment quality, drogue, and bathymetric surveys.

SECTION H2: Disposal At Sea

N/A

SECTION I1: Municipal Development

Description de l'environnement existant : Environnement physique

Baseline studies of the physical environment were conducted in 2019 and will be conducted as a component of this field program. This will include surveys of the marine (subtidal and intertidal) and terrestrial habitats within the Study Areas.

Description de l'environnement existant : Environnement biologique

Baseline studies of the biological environment were conducted in 2019 and will be conducted as a component of the field program.

Description de l'environnement existant : Environnement socio-économique

Consultation programs have been ongoing since the feasibility stage of the project. Consultation program will be undertaken in each community prior to arrival of the field team to confirm local support and gather traditional knowledge to support the baseline assessments.

Miscellaneous Project Information

N/A

Identification des répercussions et mesures d'atténuation proposées

Potential impacts to terrestrial and marine habitat and wildlife may occur, however, all personnel will be accompanied by a local field assistant to confirm minimal disturbances. Minor disruptions to traditional land use may occur in the proposed study area, however, arrival of the research team will be advertised on local social media prior to arrival. There may be temporary sediment suspension in marine habitats due to grab sampling but the footprint of this activity is small and sediment disturbance will be minimal.

Disturbance to heritage resources is possible, but unlikely. Measure to mitigate impacts are described in the Class 2 archaeological permit which was submitted to the C&H department. There will be an increase in anthropogenic presence in the Study Area but the research team is relatively small and are conducting non-invasive short term studies. See Table 10-1 in application letter.

Répercussions cumulatives

Limited cumulative effects are anticipated, as most project components have mitigation measures in place that will limit impacts.

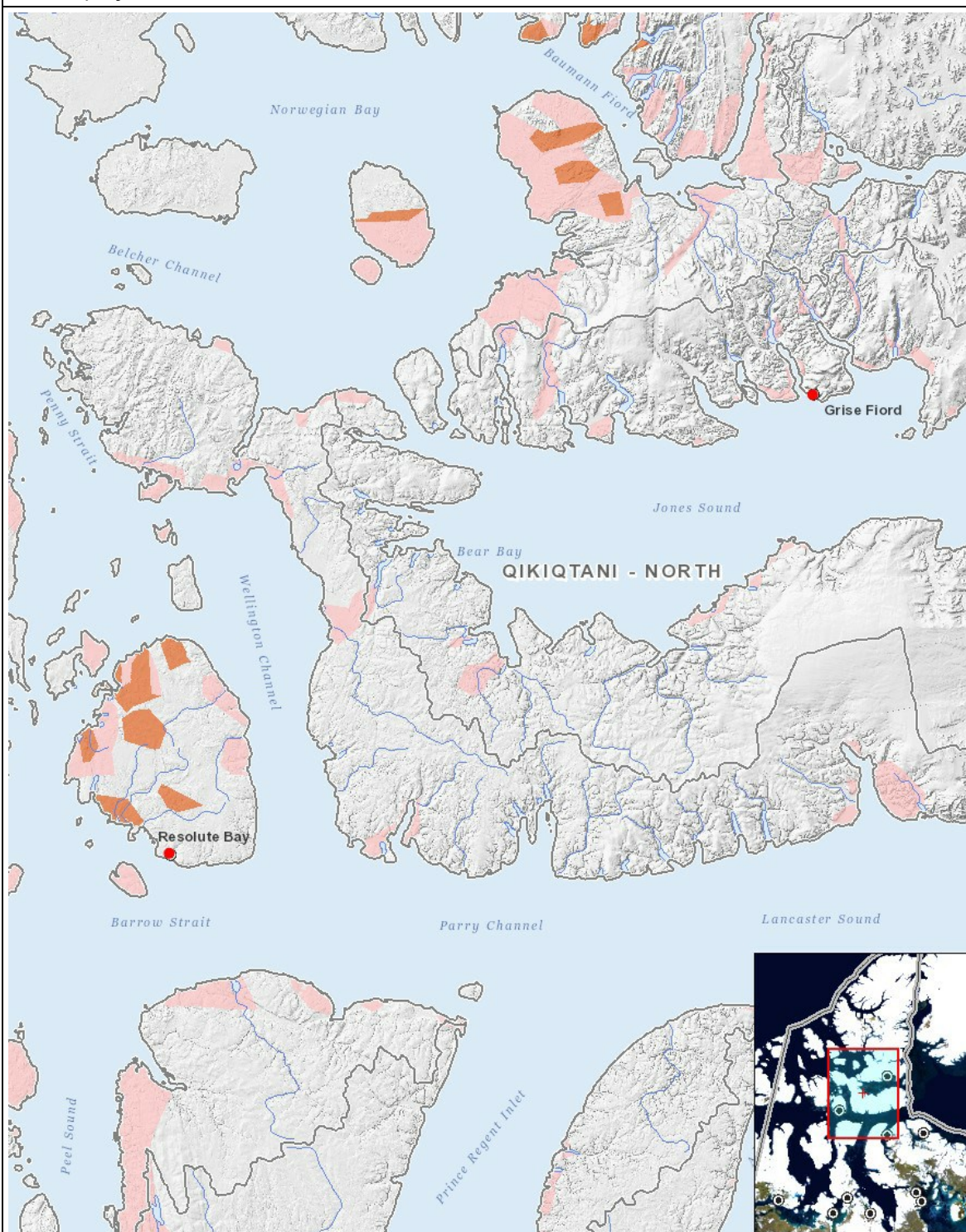
Impacts

Identification des répercussions environnementales

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

(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

Site du projet



Liste des géométries de projet

- | | |
|---------|---|
| 1 point | General location for Grise Fiord, located on the southern shore of Ellesmere Island in Jones Sound. |
| 2 point | General location for Resolute Bay, located on the south shore of Conwallis Island in Parry Channel. |