

Activities

| Location | Activity Type | Land Status | Site history | Site archaeological or paleontological value | Proximity to the nearest communities and any protected areas |
|-------------------|-------------------|---------------|--------------|--|--|
| Lot 393 Plan 4648 | Quarry/Borrow pit | Municipal | N/A | N/A | 1.8km |
| Lot 394 Plan 4648 | Quarry/Borrow pit | Municipal | N/A | N/A | 1.8km |
| Lot 400 Plan 4688 | Quarry/Borrow pit | Commissioners | N/A | N/A | 2km |
| Lot 401 Plan 4688 | Quarry/Borrow pit | Commissioners | N/A | N/A | 2km |
| Lot 395 Plan 4647 | Quarry/Borrow pit | Commissioners | N/A | N/A | 400m |
| Lot 396 Plan 4647 | Quarry/Borrow pit | Commissioners | N/A | N/A | 400m |

Community Involvement & Regional Benefits

| Community | Name | Organization | Date Contacted |
|-----------|------------------------|--------------------|----------------|
| Taloyoak | Violetta Charlie - PLA | Hamlet of Taloyoak | 2021-09-02 |
| Taloyoak | Janice Anderson - SAO | Hamlet of Taloyoak | 2021-09-02 |

Authorizations

Indicate the areas in which the project is located:

Kitikmeot

Authorizations

| Regulatory Authority | Authorization Description | Current Status | Date Issued / Applied | Expiry Date |
|--|--|----------------|-----------------------|-------------|
| Government of Nunavut, Community Government & Services | CGS Authorization Letter - Taloyoak Quarry Sites | Active | 2021-09-02 | |

Project transportation types

| Transportation Type | Proposed Use | Length of Use |
|---------------------|-----------------------------|---------------|
| Land | Dump trucks, light vehicles | |

Project accomodation types

Community

Material Use

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

| Equipment Type | Quantity | Size - Dimensions | Proposed Use |
|----------------|----------|-------------------|--------------------------|
| Loader | 1 | 5.7m x 2.7m | excavate quarry material |
| Dump Truck | 1 | 2.5m x 3.4m | Haul quarry material |
| Water Truck | 1 | 10 tons | Dust control |

Detail Fuel and Hazardous Material Use

| Detail fuel material use: | Fuel Type | Number of containers | Container Capacity | Total Amount | Units | Proposed Use |
|---------------------------|-----------|----------------------|--------------------|--------------|--------|--|
| Gasoline | fuel | 1 | 1 | 1 | Liters | Fuel will be provided by the Hamlet's facilities and supplies. There will be no storage of fuel on site. |
| NA | hazardous | 1 | 0 | 0 | Liters | There will be no storage of hazardous material on site. |

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 |
|-------------------|---|----------------------------|------------------------------------|---------------------------------|
| Quarry/Borrow pit | Overburden (organic soil, waste material, tailings) | unknown | will be spread on land at the site | n/a |

Environmental Impacts:

Accidental leaks and spillages of substances such as fuel or petroleum-based lubricants - if this occurs the Hamlet will call the NU 24-hour spill report line at (867) 920-8130 and immediately extract and remove the aggregate at the point of the spill. The contaminated soil will be relocated to the community land farm. Noise and vibration effects from rock crushing/breaking and machinery.

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

No known carving stone deposits are located in this area. If a carving stone deposit is located then extraction of aggregate will cease until the Municipality decides what they wish to do. The extraction of the aggregate will go down 1-3 meters. Should flooding become an issue, drainage ditches will be constructed to promote drainage away from the pit. We will continually monitor erosion or potential for erosion and implement control measures to minimize erosion. Minor slumping may occur to the landscape due to the extraction of aggregate but will be levelled off once the quarry is depleted. No evidence of ice lenses in the area. We currently do not blast and do not foresee having to blast. We will inform the public about the sight, and post signs around the site about the safety. Staff will also follow WSCC safety regulations around the site and area. Once this site is depleted of essential aggregate, the quarry will be levelled off to avoid any steep ditches using sand, silt and any other undesirable aggregate

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

Air quality – Appears excellent. There is no reason to believe that air quality should not be excellent. Climate conditions and predicted future climate trends – The arctic is undergoing apparent raise in average temperature in the long term. This will have no incidence of this quarry .Noise levels – Noise level is of low concern but will be typical of such heavy equipment.

Description of Existing Environment: Biological Environment

Wildlife, including habitat and migration patterns – No wildlife observed, although any wildlife observed will be respected at all times during the work. Birds, including habitat and migration patterns – No birds observed, although any wildlife observed will be respected at all times during the work.

Description of Existing Environment: Socio-economic Environment

Archaeological and culturally significant sites (e.g. pingos, soap stone quarries) in the project and adjacent areas – None observed. Land and resource use in the area, including subsistence harvesting, tourism, trapping and guiding operations – The area surrounding the quarry areas is used as a gravel extraction activity. There are no subsistence harvesting or tourism activity within the surrounding quarry areas.

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

Excavation of material at the identified sites will expose underlying permafrost to warming and may cause permafrost thaw and slumping. Currently the area is surrounded by Thermokarst. Mitigation measures will be in place to limit or prevent excessive thaw such as: ensuring positive drainage away from the pit face and restricting excavation to the active layer in shallow sources.

Cumulative Effects

The overall cumulative effects are good: a good source of granular material was found, its development will provide a good source of gravel for the Hamlet and its development will provide employment in Taloyoak. No negative regional or cumulative economic effects associated with the quarries were identified.

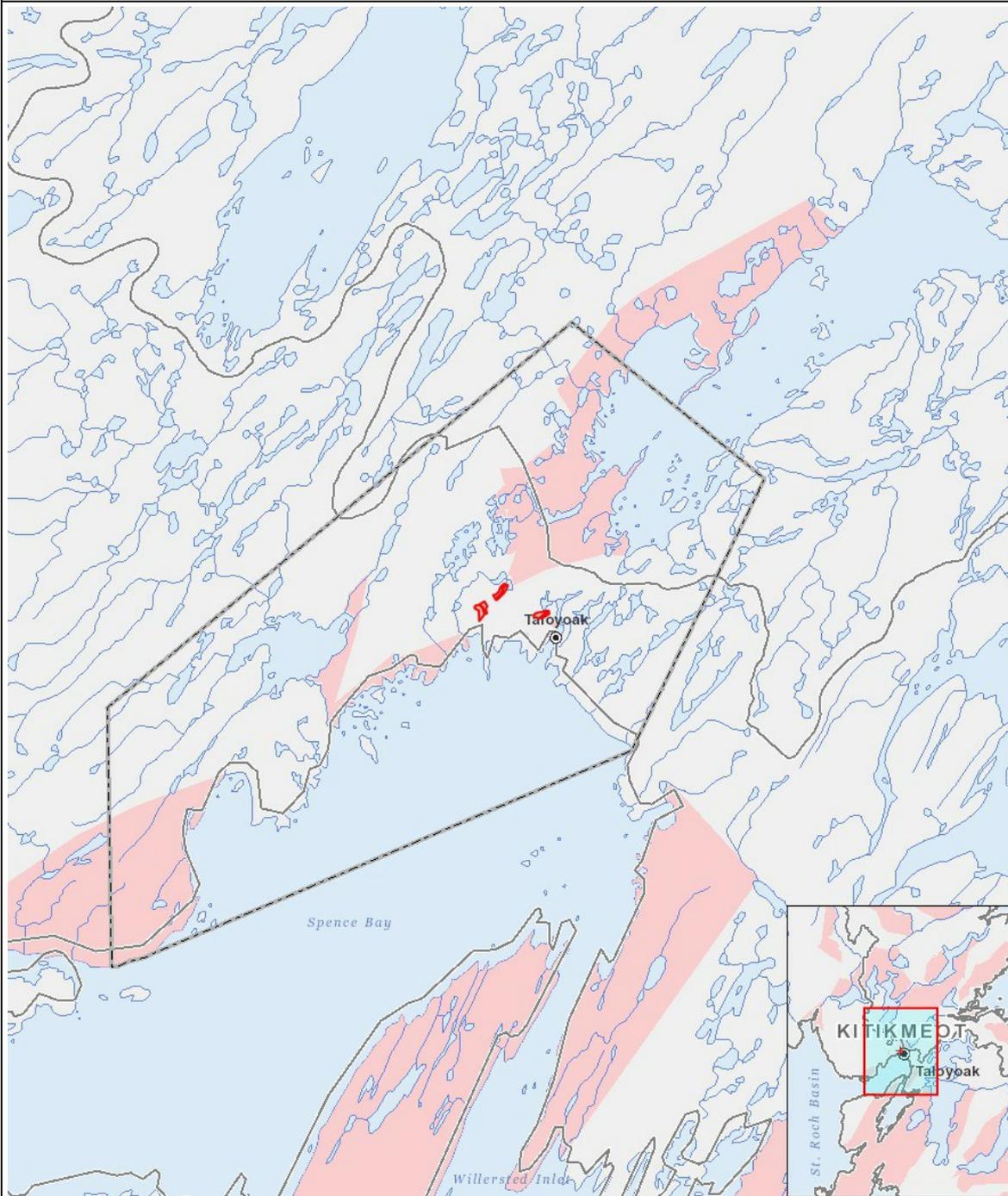
Impacts

Identification of Environmental Impacts

| | 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 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Operation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quarry/Borrow pit | - | M | - | - | - | - | - | - | - | - | - | M | M | - | - | - | - | - | - | U | P | - | P | - | - |
| Decommissioning | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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

Project Location



List of Project Geometries

| | | |
|---|---------|-------------------|
| 1 | polygon | Lot 400 Plan 4688 |
| 2 | polygon | Lot 401 Plan 4688 |
| 3 | polygon | Lot 393 Plan 4648 |
| 4 | polygon | Lot 394 Plan 4648 |
| 5 | polygon | Lot 395 Plan 4647 |
| 6 | polygon | Lot 396 Plan 4647 |