



January 24, 2025

Leila Cai
Nunavut Impact Review Board
29 Mitik Street, P.O. 1360
Cambridge Bay, NU X0B 0C0

Re: MON-24011755-A0 – Taloyoak Sealift Improvement – Returned Application #126010 Clarifications

1. **What is the footprint on the seabed that will be lost to infilling under water, including the laydown area, the grading area and riprap?**

<i>Total affected surface area below sea-level:</i>	<i>7,150 m²</i>
<i>New surface area created below sea-level:</i>	<i>2,670 m²</i>
<i>Net surface area lost below sea-level:</i>	<i>4,480 m²</i>

2. **Specify what time of the year is *construction season* for producing granular materials at potential borrow sources and carrying out in-water work? In relation to the construction timing, identify alternative means to carry out the project including conducting in-water works in winter.**

Construction is anticipated between the months of June and October. Should the project advance in full, it is anticipated that year 1 would be granular production with minimal work in-water, with the year 2 workload consisting of the placement of the material within the water.

Work for placement of materials will have to schedule around the sealift deliveries. The contractor will be responsible to coordinate and provide acceptable means of delivery areas.

3. **Is the proponent planning to construct, use, and/or decommission temporary camps during the construction phase of the project? If so, entirely on municipal lands?**

The contractor will most likely require a camp to support their staff. This area has been identified on the NIRB plan, in an area specified to EXP by Government of Nunavut staff. It is understood that this area is currently utilized by Pilitak staff when constructing the school and lagoon projects.

4. **Please provide the rationale for not including the break water for this screening application.**

The breakwater project was not included in the scope for EXP given that there was insufficient studies and information gathered in advance of our mandate. In addition, during the community engagement discussions were had with community members that suggested that the breakwater may affect the ice flow out of the harbour (now it just leaves all at once), which may be counterproductive.

The breakwater was preliminarily identified within the shallow water at the point by the church. Given that this area is already shallow water, this is already helping to reduce wave height and velocity. Construction of the breakwater would affect the wave action on the shore but also lead to deposition and erosion activities in the immediate area that have not been adequately studied.

5. Please confirm if new culvert(s) are being proposed.

No new culverts are being proposed.

6. Will aircraft be used during project construction, other than transporting personnel and/or materials to the site?

No, only expecting the use of planes for mobilization of people and goods.

7. Will the project use water from sources other than municipal drinking water supply for construction, including watering roads to suppress dusting?

Water is not expected to be required beyond dust reduction requirements. That said, alternative dust control options could be considered should water use from potable or non-potable sources be a challenge to get approvals.

8. Describe what abandoned materials or structures, or wastes will require disposal at sea per Section H2? Include the volume of disposed materials or waste.

Waste is not expected to be disposed of at sea. The only material placed within the water will be material meeting project requirements for aggregate materials.

9. What is the footprint of the current sealift receiving station and its condition (i.e. the need for the project, for example, are the structures in use aging, rusting, slumping and falling apart into the marine environment)?

Existing ramp conservatively estimated as 250 m². This area is adjacent to an existing roadway, being a sand and gravel slope to the water with the use of a ramp system (see photo below).

The current sealift area has no permanent infrastructure. Current ramp systems are installed by driving equipment into the water to place them against the barge. (see photo below)



10. Provide copies of the use history of the granular materials from the proposed quarries and provide responses to the following:

- a) Is blasting required to produce new granular materials at the existing sites? If so, please provide measures to reduce residuals on granular materials for deposition in water.**

Depending on the final list of project requirements from the NIRB (and particularly DFO), the project may dictate blasting operations are required. That said, should the requirements be less than what is currently envisioned, the required fill may be realized with only minor screening operations.

- b) Provide documents on feasibility of the three identified quarries in operation to supply all granular materials (type, size, and volume), given the scale of infilling required for this project.**

The quarries envision for the project we recently used for the lagoon project. Following the verification of project requirements, the available materials will need to be reviewed. There is adequate supply around the community; however, depending on volume requirements blasting could be required.

Please see attached to the email historical quarry assessments for the community, and aggregate sieves from the recent lagoon project.

- c) Are there plans to develop new quarry sources to meet the need of the project?**

No plan to develop a new quarry for this project.

11. Provide a copy of the report of the bathymetric survey or a summary of the results of the survey. Based on the bathymetric survey results, provide professional judgement on the following:

- a) Analysis on the risk of scouring and stability of the project due to the physical environment;**

The slope of the gravel within the existing project has been designed to provide a stable sealift area for the current and future needs of the sealift.

- b) Potential habitat use by marine mammals and fish in the area;**

The bathymetric results show that the area has fairly uniform slopes from the surface to the deepest section in the middle of the channel. It is expected that the area within the work area would be habitat for mammals and fish, and that the new surface of the sealift area ($2,670 \text{ m}^2$ surface) would also be new habitat.

- c) And whether further studies are needed.**

Further studies, if required, will be identified by NIRB or DFO.

12. How will the proponent mitigate impacts on the existing road network used by the community due to construction traffic? Consider dusting, road use safety, and road rutting due to heavy traffic.

Within the specifications the requirements for road use, road maintenance, and road repair will be outlined. Given the current road network and the location of the quarries compared to the project site, the contractor will be required to utilize the main roads to transport material to the project site.

In addition to the contractor requirements, the community roads are often used by heavy trucks to transport materials that are offloaded at the existing sealift area. The hamlet has backup contingency to repair and improve road networks to ensure that they are maintained. The contractor will be specified to maintain the roads during construction and take necessary measures to control the dust, to employ traffic safety personnel at critical intersections, and to notify of any maneuvering obstacles and road repairs.

13. Provide engagement records of the December 2024 community meeting as referred to in section I1 of the application to the NIRB. And identify potential changes to project design, including location.

The community consultation meeting was held on November 26, 2024, in Taloyoak. The meeting was not well attended; however, some good discussions did occur resulting in a better understanding of the operations in this area, the ice break-up behavior, and challenges that may come with construction. A photo from the community consultation is below.

The following day EXP and GN representative sat down with the ASAO to discuss the project further. There was no desire to change any portion of the project from their standpoint, rather wanted to try to accelerate the process if possible. No recommendation was provided to relocate the project, as the council was critical in the process of selecting the current location as the future site.



14. Please propose mitigation measures that are specific to impacts from the proposed project, including providing records of consultation with responsible authorities and community members to identify concerns and acceptable mitigation.

The current design approach considers that anticipated DFO requirements for aggregates placed below the water surface. Beyond this, material above the water surface will be reinforced with geogrid to minimize the effects of wave erosion and settlement.

Sincerely,

Adrian Thompson
Project Manager & Geotechnical Engineer
EXP Services Inc.