

Nunavut Planning Commission  
P.O. Box 2101  
Cambridge Bay, Nunavut X0B 0C0

March 17, 2017

Attention: Sharon Ehloak, Executive Director

**RE: Proposal for Amendment to the NBRLUP in relation to the Mary River Phase 2 Expansion Project (NPC File # 148420).**

On February 3, 2017 Baffinland Iron Mines Corporation (Baffinland) re-submitted the Project Proposal for the Mary River Phase 2 Expansion Project (Project Proposal) to the Nunavut Planning Commission (NPC) for a Land Use Conformity Determination as directed by the Nunavut Impact Review Board (NIRB).

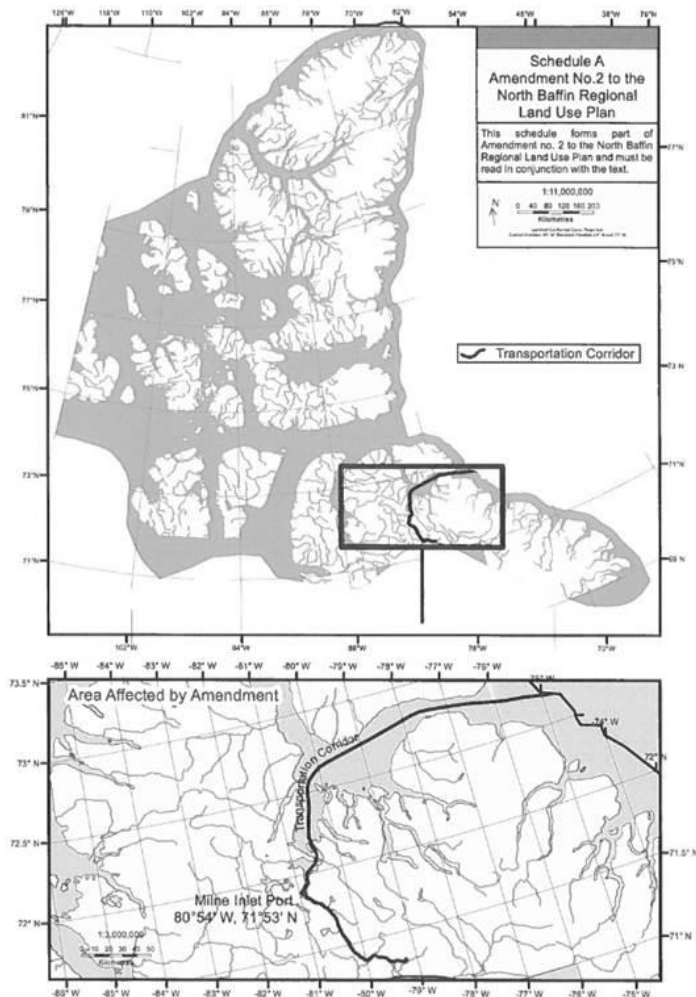
The NPC's correspondence dated March 06, 2017 stated that the proposed rail line, additional

infrastructure at the Milne Inlet Port site and the winter sealift of freight would constitute the development of a transportation corridor and requested that Baffinland provide additional information under section 3.5.11 of the North Baffin Regional Land use Plan (NBRLUP).

The NBRLUP currently includes the Milne Inlet Tote Road and Marine Transportation Corridor which was established under section 3.5.11 of the NBRLUP. Baffinland is not proposing a new route and, as shown in the Project Proposal, all activities would occur within the existing Corridor.

Baffinland acknowledges that the NPC is currently in the process of finalizing the Draft Nunavut Land Use Plan (DNLUP) and has limited capacity to process amendments to the existing Land Use Plans which will be replaced once the DNLUP process is completed. In order to advance the ongoing Conformity Determination process in the most efficient and comprehensive manner possible Baffinland respectfully requests that the NPC pause the current Conformity Determination process, consider the following proposed amendment to the

NBRLUP and, once completed, make a positive conformity determination on the Project Proposal.





## Proposal for Amendment

Baffinland is proposing under section 59 (1) of the Nunavut Planning and Project Assessment Act (NuPPA) an amendment to the existing Milne Inlet Tote Road and Marine Transportation Corridor (Appendix Q of the NBRLUP) to ensure that the proposed activities are consistent with approved planning policies and objectives of the Nunavut Agreement and the NBRLUP. Specifically, Baffinland proposes to amend Appendix Q to provide for transportation by rail through the corridor.

Appendix Q allows for “marine infrastructure including aids to navigation, fixed docks, floating docks, piers, ports, loading and unloading facilities, storage facilities, refueling facilities and any other facilities or infrastructure which is required for operating the port or for ensuring the safe passage of vessels”. Therefore it can be concluded that the development of a second ore dock to accommodate Cape sized vessels, a second ship loader, railway unloading and maintenance facilities and additional support infrastructure is in compliance with the NBRLUP and no amendment to Appendix Q would be required.

For clarification Baffinland is proposing to have the ability to conduct winter sea lifts of freight from December 01 through February 28 annually with a maximum of two events during this period. Fuel and iron ore will not be transported during these events. This additional information and the recent positive conformity determination made by the NPC for similar activities indicate that no amendment to Appendix Q would be required, however, wording is proposed for clarification.

Baffinland acknowledges and appreciates the time taken by the NPC staff to engage in informal meetings with us in relation to the Project Proposal. Further, Baffinland respects the mandate of the NPC and is seeking to advance the Mary River Project in compliance with all legislative and regulatory requirements established under the Nunavut Agreement.

Documentation addressing the additional information requested in your letter of March 06, 2017 is attached (Attachment 1). Additionally, in accordance with Section 59 (1) of the NuPPAA and the NPC Internal Procedure “Amendments to Land Use Plans (March 2015)” attached is the proposed amendment to Appendix Q (Attachment 2).

We request that the NPC consider the proposed amendment and, if it considers it appropriate to do so, conduct a public review. **Baffinland urgently requests that the amendment process be executed as expeditiously as possible** to allow the Project Proposal to return to the NIRB process for a full and comprehensive environmental assessment.

Thank you,

A handwritten signature in black ink, appearing to read "T. Burlingame", written in a cursive style.

Todd Burlingame

VP Sustainable Development

Cc/ Aluki Kotierk, President, NTI; PJ Akeeagok, President, QIA; Honorable Carolyn Bennett, Minister INAC; Hon. Joe Savikataaq, Minister, Department of Environment, GN

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**Mary River Phase 2 Expansion Project**

**ATTACHMENT #1**

Response to NPC Request for Additional Information

**NPC File #148420**

March 17, 2017



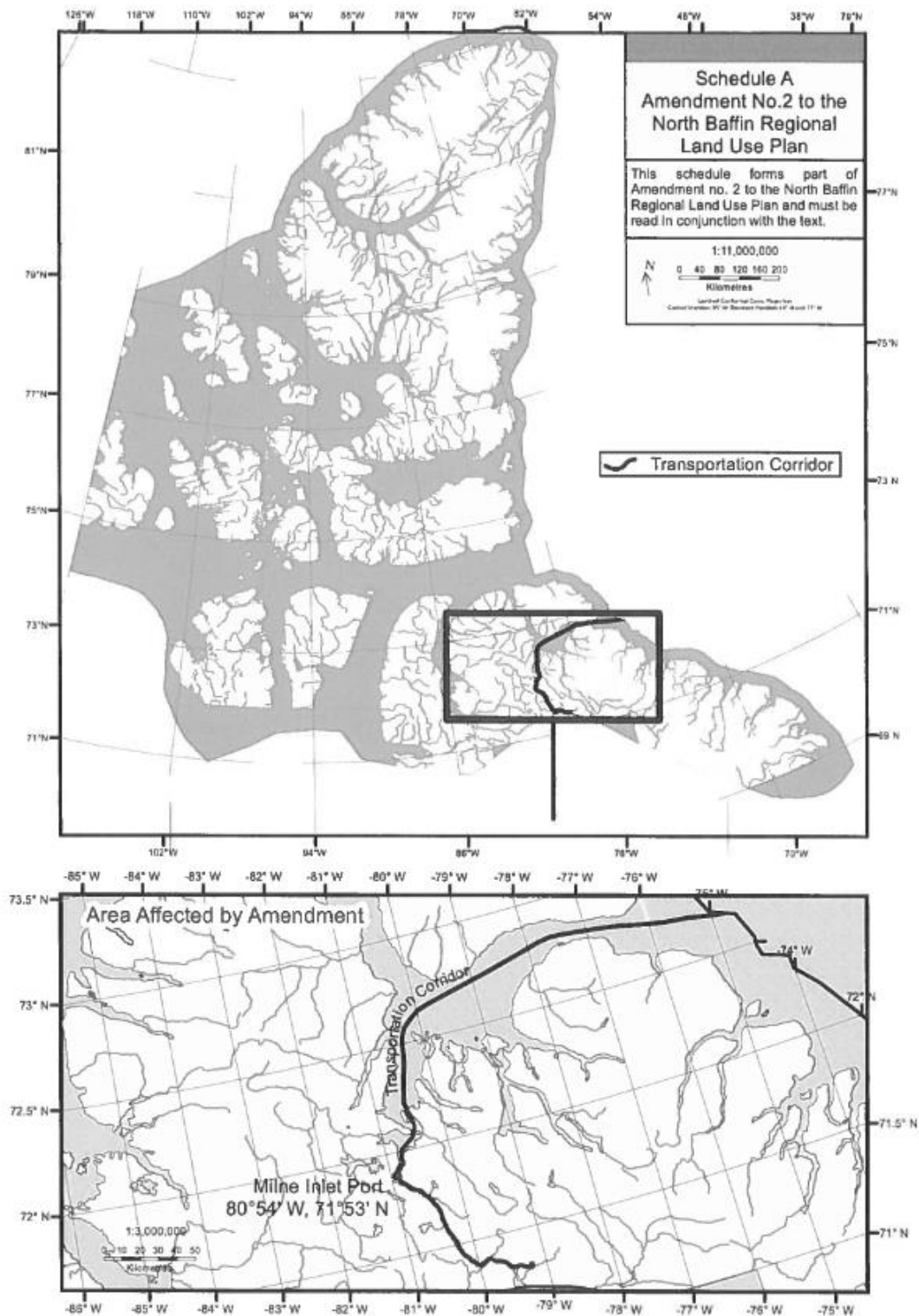
## 1 Introduction

On March 6, 2017, the Nunavut Planning Commission (NPC) requested Baffinland Iron Mines Corporation (Baffinland) to submit additional information required under section 3.5.11 of the North Baffin Regional Land Use Plan (NBRLUP) for the Mary River Phase 2 Expansion Proposal (Project Proposal) request for Land Use Conformity Determination.

The Project Proposal submitted to the NPC on March 03, 2017 includes the construction of a railway within the Milne Inlet Tote Road and Marine Transportation Corridor that follows the existing Tote Road. This corridor has been established and is recognized as a transportation corridor in both the Nunavut Agreement and the NBRLUP (See Figure 1.1).

Baffinland has engaged with the Hamlet of Pond Inlet and Mittimatalik Hunters and Trappers Organization (MHTO) for the purpose of alerting them to the potential requirement to amend the NBRLUP for the purpose of including the use of rail in the definition of the Milne Inlet Tote Road and Marine Transportation Corridor and allowing for a positive conformity determination to be made by the NPC prior to returning to the Project Proposal back to NIRB for a comprehensive environmental assessment. During the engagement no opposition to include railway development as an acceptable land use within the existing corridor was raised by the participants.

**Figure 1.1 Existing Transportation Corridor as shown in Schedule A to Appendix Q of the NBRUP (NPC, 2014)**





## 2 Response

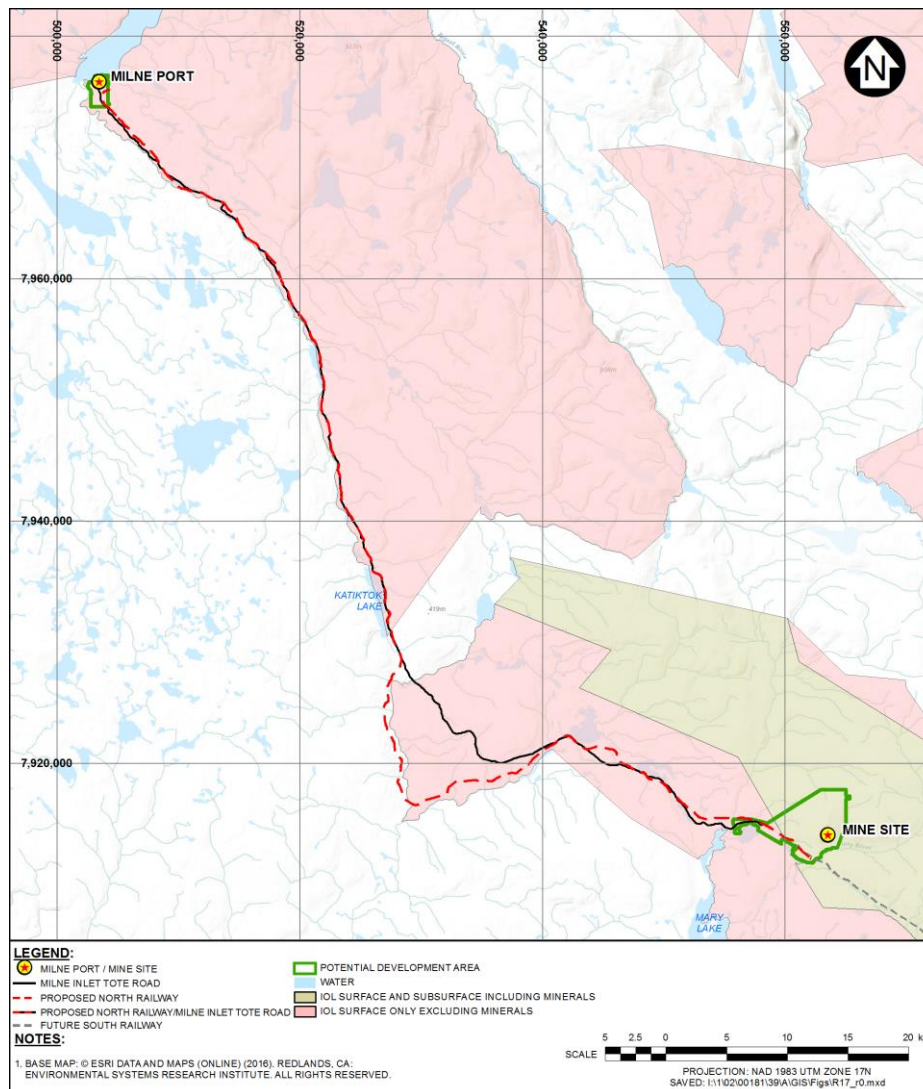
The requirements of section 3.5.11 of the NBRLUP include:

- An assessment of alternative routes;
- The cumulative effects of the preferred route, and;
- Reasonable options for other identifiable transportation and utility facilities

### Assessment of alternative routes:

The Project Proposal does not seek the establishment of a new route within the existing corridor established under Appendix Q of the NBRLUP. The preferred route follows the existing Tote Road (see Figure 2.1). No other alternatives to the route are considered feasible. There would be no change to the marine component of the existing transportation corridor (see Figure 2.2).

**Figure 2.1 The Northern Transportation Corridor and Proposed North Railway**



**Figure 2.2 The Northern Shipping Corridor**



The continued utilization of the existing route was based on the following criteria:

- Existing infrastructure;
- Technical feasibility;
- Regulatory acceptability;
- Cost-effectiveness;

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- Impacts on the natural environment;
- Impacts to the socio-economic environment (mainly land use); and
- Community preference or acceptability.

By following the existing route the following factors are also able to be met:

- Minimises negative impacts on community lifestyles by following the terrestrial component of the existing transportation corridor;
- Improves access to other resources having high potential for development, maintaining the shortest practicable distance between the primary resource areas and the trans-shipment location;
- Designed in accordance with existing and prospective land use capability including topography, soil, permafrost and wildlife has been designed in accordance with the availability of granular supplies;
- Strives to not negatively impact community business, residential and projected expansion areas;
- Strives to not negatively impact important fish and wildlife harvesting areas;
- Strives to not impact key habitat for fish and wildlife species, especially areas used by endangered species; and
- Strives to not impact high scenic, historic, cultural and archeological value.

The consideration of these criteria and factors meant a preferred route that follows the existing Tote Road (see Figure 2.1) was the only feasible option and consideration of alternative railway routes would not be practical or reasonable. This position is based on:

- The alignment is located along the existing transportation corridor established by Amendment No. 2 of the North Baffin Regional Land Use Plan. Transportation corridors are established under land use planning principles with the intent of accommodating future transportation and/or communications facilities, to minimize the overall disturbance to the landscape. Therefore, construction of the north railway along the existing transportation corridor is consistent with both land use planning principles and with the amended NBRLUP.
- The existing road is available to support construction, which significantly reduces the railway construction costs. By comparison, when Baffinland builds the south rail in the future, it will be necessary to construct a dedicated construction access road to facilitate construction, because a road does not currently exist in that location. Selection of an alternative route for the north railway would require additional construction access roads.
- By using a common transportation corridor, impacts to land users as well as wildlife is minimized. Losses of wildlife habitat, sensory disturbance effects to wildlife, and impacts to Inuit land use and harvesting are minimized.
- Archaeological surveys over multiple years along with mitigation of sites through systematic data recovery have established that while archaeological sites do exist within the corridor, no culturally significant sites have been identified to date that would be potentially affected by the proposed project.



- The location of the railway alignment in relation to outpost camps as well as hunting and travelling routes is an important consideration. The only outpost camp in the area is located on the west side of Camp Lake; this is the MHTO cabin that Baffinland constructed in 2013 to compensate for the former MHTO cabin located within the Mine Site. In the vicinity of the outpost camp, the proposed railway is located further away than the existing Milne Tote Road.
- Inuit travel extensively throughout the North Baffin region, including in the vicinity of the terrestrial component of the existing transportation corridor and the proposed north railway. Primary travel routes, derived from Inuit knowledge workshops completed in the late 2000's for the Project, were found to generally travel parallel to the terrestrial component of the existing transportation corridor alignment without crossing it and have numerous alternatives.

No change is proposed to the route of the marine component of the existing transportation corridor.

**Cumulative Effects of the preferred route:**

No new route is proposed for the transportation corridor and therefore no change to the cumulative effects of the route will be realized. The cumulative effects of including the mode of transportation of rail as an acceptable land use within the existing terrestrial component of the corridor include:

- Less interactions with traditional land uses: the reduced frequency of trips required when using rail for transport of ore will lessen interference with Inuit travel and harvesting activities while maintaining safety, access and ease of travel with the use of designated caribou, snowmobile and ATV crossings, and hunter and visitor site access procedures.
- No new route for linear infrastructure: the preferred railway route will follow along the existing Tote Road. The development of the railway between the Mine Site and Milne Port will therefore not result in the creation of a new linear development route in the area, and will therefore not create increased access to any currently remote areas and associated environmental issues or represent an additional linear barrier to traditional land users and wildlife.
- Economic sustainability: development of a railway within the alignment of the existing transportation corridor allows Baffinland the only feasible way identified of achieving overall economic feasibility and long-term sustainability.
- Reduced interactions: the development and use of the railway from the Mine Site to Milne Port will have the effect of reducing and ultimately replacing the use of haul trucks to transport iron ore along the terrestrial component of the transportation corridor. This will reduced the likelihood of potential disturbances to other land users and wildlife in the area including collisions or other sources of possible injury or mortality.
- Reduced dust and sedimentation: the development and use of the railway and ultimately the replacing the use of haul trucks to transport iron ore along the terrestrial component of the transportation corridor will create far less dust and associated sedimentation along the terrestrial component of the transportation corridor.
- Improved air quality: the planned use of rail as opposed to truck traffic will also considerably reduce any resulting atmospheric emissions and resulting air quality effects that would result from this

vehicular traffic (including carbon monoxide (CO), nitrogen oxides (NOX), total suspended particulates (TSP), volatile organic compounds (VOCs), greenhouse gases (GHGs)).

- Reduced noise: in general, noise and vibration are not considered to be a significant issue for low speed rail operations such as this, except in the direct vicinity of rail yards and during car connections. Ballasted track (particularly with timber ties) absorbs vibration to some extent, and maintenance activities carried out on a regular basis will also correct many of the small irregularities that cause major noise and vibration in the railway system. An estimate of, and analysis regarding, potential Project-related air and noise emissions, and a comparison of those related to truck traffic and the railway, will be calculated and provided in the EIS in the event Baffinland is approved to proceed to the NIRB process.

No new route or activity/land use is proposed for the marine component of the transportation corridor and therefore no new cumulative effects will be realized. The planned development of the railway and the expansion of the facilities at Milne Port will allow Baffinland to optimize its planned iron ore shipments during the ice free / open water period. As a result, Baffinland will be seeking approval to ship ore from July 01 to November 15. This is considered to be a more acceptable scenario than the requirement under the previous concept which would have seen the shipping period extending from early June through the end of March, along with associated ice management, trans-shipping activities and facilities and required seasonal fuel storage at sea.

Baffinland also proposes the ability to conduct winter sea lift of freight if required to support on-going operations. The winter sea lifts of freight would only occur from December 01 through February 28 annually with a maximum of two events during this period. Fuel and iron ore will not be transported during these events. This activity has previously been determined to be in conformance with the NBRLUP.

**Options for other identifiable transportation and utility facilities:**

Baffinland is not aware of any other possible communication and transportation initiatives along the terrestrial component of the corridor or the Northern Shipping corridor. Milne Port will be developed for the exclusive use of Baffinland. No other potential users of this facility have been identified.



**Mary River Phase 2 Expansion Project**

**ATTACHMENT #2**

Proposed Amendment to Appendix Q  
of the  
North Baffin Regional Land use Plan

**NPC File #148420**

March 17, 2017

## **Proposed Amendment to Appendix Q of the North Baffin Regional Land Use Plan**

### **Part I: Explanatory Notes**

#### **1.1 Introduction**

Pursuant to subsection 59(1) of the *Nunavut Planning and Project Assessment Act* (“NuPPA”), Baffinland Iron Mines Corporation (“Baffinland”) proposes to amend Appendix Q of the North Baffin Regional Land Use Plan (Appendix Q). These Explanatory Notes are provided for background and information purposes only and do not form part of the Amendment.

Proposed revisions to the current text of Appendix Q are shown in Part 2 in highlighted text.

#### **1.2 Purpose**

The purpose of the proposed amendment is to clarify that the existing Milne Inlet Tote Road and Marine Transportation Corridor as described and defined in Appendix Q of the North Baffin Regional Land Use Plan may be used for rail transportation and related infrastructure, expansion of the existing port facilities and for winter sealift.

#### **1.3 Scope of Proposed Amendment**

The description of the lands and location of the routing of the Milne Inlet Tote Road and Marine Transportation Corridor as depicted in Appendix Q remain unchanged. The Amendment does not involve the establishment of a new route or change of location of the existing corridor established under Appendix Q or any change to the marine component of the existing transportation corridor.

The preferred railway route will follow along the existing Tote Road and will consequently not result in any new route for linear infrastructure. There will be no interference with the public right of access to the transportation corridor as described in Schedule 21-2 of the *Nunavut Agreement* or with the activities of traditional land users.

No new route is proposed for the marine component of the transportation corridor.

The proposed amendment will:

1. Revise the description of the transportation corridor (bullet 1, Appendix Q) by including a reference to potential railway and related infrastructure and to the Mary River Phase 2 Expansion Project Proposal;
2. Revise the description of the terrestrial component of the transportation corridor (bullet 2, Appendix Q) by including a reference to rail and related infrastructure; and

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3. Revise the description of the marine component of the transportation corridor (bullet 3, Appendix Q) by including a reference to a winter sea lift during the months of December, January and February.

The inclusion of rail as a permitted mode of transportation within the Milne Inlet Tote Road and Marine Transportation Corridor will:

- reduce interference with traditional land uses and maintain safety, access and ease of travel with the use of designated caribou, snowmobile and ATV crossings, and Hunter and Visitor Site Access procedures.
- promote overall economic feasibility and long-term sustainability of the Mary River Project by optimizing the transport and shipping of ore
- lessen adverse environmental effects currently associated with road transportation (reduced dust and sedimentation and noise, improved air quality)
- diminish the likelihood of injuries or fatalities and other disturbances to land users and wildlife

The amendment to the marine component of Appendix Q to allow for the conduct of a winter sea lift of freight if required to support on-going operations is proposed for clarification purposes only as the Nunavut Planning Commission has previously issued a positive conformity determination in respect of similar activities.

Since Appendix Q already allows for “marine infrastructure including aids to navigation, fixed docks, floating docks, piers, ports, loading and unloading facilities, storage facilities, refueling facilities and any other facilities or infrastructure which is required for operating the port or for ensuring the safe passage of vessels”, no further amendment to the marine component with respect to the development of a second ore dock, ship loader, railway unloading and maintenance facilities and additional support infrastructure is required.

No other changes to Appendix Q are proposed.

## **1.5 Stakeholder Engagement**

Baffinland has consulted with potentially affected stakeholders, including the 5 North Baffin communities, with respect to the use of rail as part of the Mary River Phase 2 Expansion Project. Baffinland has also consulted with the Mittimatalik Hunters and Trappers Organization and the Pond Inlet Hamlet Council with respect to the proposed amendment of the North Baffin Regional Land Use plan to include rail and associated activities as permitted use of the Milne Inlet Tote Road and Transportation Corridor and no objections to the proposed amendment have been expressed.



## Part 2: Proposed Amendment

### Draft Proposed Amendment to Appendix "Q" of North Baffin Regional Land Use Plan

The lands generally located North of Mary River, North Baffin Island, 1000km North of Iqaluit, and generally described as the lands located North of Mary River, North Baffin Island, 1000 km North of Iqaluit, and described as the line commencing at the Mary River Mine Site, approximately 71.3N-79.22W, and running generally North for approximately 110 km to the Milne Port at approximately 71.53N-83.54W and then running generally North through Milne Inlet and then East through Eclipse Sound to Baffin Bay for approximately 270km and as generally illustrated in Schedule "A" of the Amendment may be developed for the purpose of a transportation corridor in accordance with the following provisions.

- The transportation corridor, for the purposes of this Amendment, contains two components, one terrestrial and the other marine. Together they include the Milne Inlet Tote Road, a potential railway and related infrastructure, Milne Port and the marine shipping route from the Milne Port North through Milne Inlet and then East through Eclipse Sound to Baffin Bay to the eastern extent of the land-fast ice zone as illustrated in Schedule A to this Amendment and may also include any infrastructure, support facilities, and any other related systems associated with the safe operation of the transportation corridor, and as outlined in the Early Revenue Phase Addendum to Final Environmental Impact Statement and the Mary River Phase 2 Expansion Project Proposal.
  - The terrestrial component, encompassing the Milne Inlet Tote Road, includes a fixed smooth or paved surface, made for travelling by motor vehicle or carriage throughout the year and is available for use for a railway and for related infrastructure and may include, bridges, culverts, tunnels, crossings, signals, telecommunication facilities, yards, terminals and service and storage facilities associated with a road or railway as well as any other infrastructure required to ensure the safe operation and movement of motor vehicles, ~~or~~ carriages or train cars.
  - The marine component, encompassing the shipping corridor, includes a marine travel route used by ship traffic to navigate and may also include marine infrastructure, including aids to navigation, fixed docks, floating docks, piers, ports, loading and unloading facilities, storage facilities, refueling facilities and any other facilities or infrastructure which is required for operating the port or
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for ensuring the safe passage of vessels. For greater certainty, the marine corridor may be used for shipments of freight by winter sealift through ice during the months of December, January and February.

- A transportation corridor, for the purposes of the NBRLUP, may be used by any person for the purpose of transportation, including for the purpose of servicing the operation of the Mary River Mine Site and transporting iron ore from the Mary River Mine Site. Any industrial activity within the corridor shall be in accordance with the terms and conditions of any project certificates, permits, licences, or authorizations. Any incidental activities or regular maintenance associated with the upkeep or continued operation of the transportation corridor to ensure the safe operation of transportation-related infrastructure and activities will not require further review or amendment.
- Nothing in this Amendment will prevent or prohibit the public right of access for the purpose of transportation, as described in Schedule 21-2 of the Nunavut Land Claims Agreement (“NLCA”), on the Inuit Owned Lands described in that Schedule.
- Nothing in this Amendment will prevent or prohibit the use of the lands as described in this Amendment and as shown on Schedule "A" for the purpose of wildlife harvesting and/or traditional activities carried out by residents of the Region.
- Traditional activities may include hunting, fishing, camping and any other activity considered by residents to be important in maintaining a traditional lifestyle.
- Nothing in the NBRLUP will prevent or prohibit navigation in the marine environment in accordance with existing international law and conventions, federal laws and regulations applicable to shipping and navigation, and the NLCA.
- No new prohibitions are contained or proposed in this Amendment.