



2020 WORK PLAN

1 November 2019




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SECTION 1.0 - INTRODUCTION

The following document presents the 2020 Work Plan for the Mary River Project as required under Section 6.1 of Commercial Lease No. Q13C301 (the Lease) agreed between Baffinland Iron Mines Corporation (Baffinland) and the Qikiqtani Inuit Association (QIA). Additionally, this document is a requirement under Amendment No. 1 of the Type 'A' Water Licence 2AM-MRY1325 for the purposes of an Annual Security Review (ASR). In the event the Project does not advance, the work items as described and constructed in the 2020 Work Plan will be subject to reclamation, as per the Mary River Project Interim Closure and Reclamation Plan (BAF-PH1-830-P16-0012, refer to Appendix C) and relevant regulatory and permit obligations.

The 2020 Work Plan has been prepared in accordance with the Lease Operations Guide for the "Annual Work Plan Submission" finalized in 2018. The Operations Guide is a set of procedures developed jointly by QIA and Baffinland to guide the on-going administration of the Lease.

Baffinland continues to expand the operation of the Mary River Project, both through the 6 million tonne per annum (Mtpa) increase approved in 2018 and the submission of the Phase 2 Environmental Impact Statement (EIS) in 2018. Activities outlined in this 2020 Work Plan represent planned works, improvements, infrastructure and equipment required to execute the currently approved phase of the project.

Additionally, the 2020 Work Plan considers works that are planned based on the anticipated approval of the Phase 2 proposal in 2020. While the 2020 Work Plan and the associated reclamation security estimate provided in Appendix B considers the scope of the Phase 2 proposal activities planned for 2020, these activities may not proceed until the relevant approvals are gained, as outlined in Table 3.1. This approach ensures that adequate securities are considered for each stage of the approval process and reduces the administrative burden of subsequent Work Plan amendments and review.

An overview of the on-going mining operations and works planned for 2020 is provided below, with further details presented in subsequent sections of the document.

1. Development and operation of the mine, ore crushing and land transportation, stockpiling and marine shipment of ore;
2. The continued development and construction of infrastructure required at Milne Port and the Mary River Mine Site (Mine Site) and along the Tote Road for the Mary River Project;
3. Continued operation of Mine Site and Milne Port Camps to support ongoing operations and construction activities which will include the use of water and deposition of waste as authorized under existing permits;
4. On-going operation and expansion of permitted quarry and borrow sources; additionally, fifteen (15) new quarries have been identified along the Northern Transportation Corridor to support ongoing maintenance and construction;
5. At Milne Port, vessels carrying fuel, equipment and supplies for use at the Mine Site and Milne Port will arrive during open water. Material, fuel and supplies required for operational and construction activities will be transported to the Mine Site year round via the Tote Road;

6. Ongoing environmental effects studies and baseline data collection will continue to support the construction and operation of the Project as well as for future engineering requirements;
7. Continued environmental monitoring in accordance with the approved Project Certificate, licenses, authorizations, management plans and environmental effects monitoring plans;
8. On-going exploration activities including drilling, mapping, prospecting, sampling, and geophysics. Planning of the details of the summer drilling and/or trenching program is not yet finalized;
9. Tote Road improvements to address safety concerns, freshet runoff issues and poor road conditions during the spring and summer periods;
10. Continued construction of additional fuel storage at the project;
11. Site grading and laydown construction for supplies and equipment to support future construction activities and remove ponding and permafrost degradation issues around current infrastructure.
12. Erection of additional maintenance facilities to safely service equipment.

SECTION 2.0 - LIST OF CURRENT PERMITS

The Work Plan is presented within the context of the applicable regulatory authorizations. The main regulatory instruments that allow for the 2019 Work Plan activities are presented in Table 2-1 below.

Table 2-1: Existing Environmental Permits

Permit Name	Permit Number	Regulatory Agency	Expiry
Project Certificate and Amended Project Certificate	005	Nunavut Impact Review Board	No Expiry
Inuit Impact Benefit Agreement	N/A	Qikiqtani Inuit Association	No Expiry
Commercial Lease	Q13C301	Qikiqtani Inuit Association	31-Dec-43
Amendment No.1 Type A Water Licence	2AM-MRY1325	Nunavut Water Board	10-Jun-25
Type B Water License – Exploration	2BE-MRY1421	Nunavut Water Board	16-Apr-21
Land Use Permit - Steensby	N2019C0009	Crown Indigenous Relations and Northern Affairs Canada	29-Jun-24
Land Use Permit – Tote Road	N2019Q0011	Crown Indigenous Relations and Northern Affairs Canada	29-Jun-24
Land Use Permit - Bruce Head	N2019J0010	Crown Indigenous Relations and Northern Affairs Canada	29-Jun-24
Quarrying Permit - Tote Road (Borrow P1 at Km 63)	Under Review	Crown Indigenous Relations and Northern Affairs Canada	N/A
Land Lease - Milne Foreshore	47H/16-1-2	Crown Indigenous Relations and Northern Affairs Canada	30-Jun-35
Permitted Quarries and Borrows on Inuit Owned Land: Quarries Q1, QMR2, Q7, Q11, Q19, Borrows KM104, Km 2, and Km 97	N/A	Qikiqtani Inuit Association	N/A
Fisheries Authorization - Ore Dock	14-HCAA-00525	Fisheries and Oceans Canada	31-Dec-20
Fisheries Authorization – Freight Dock	18-HCAA-00160	Fisheries and Oceans Canada	1-Jun-20
Fisheries Authorization - Tote Road	NU-06-0084	Fisheries and Oceans Canada	No Expiry
Fisheries Authorization – Crossings	06-HCAA-CA7-00084	Fisheries and Oceans Canada	N/A
Fisheries Crossings along Tote Road and Quarries, culvert extensions and replacements	Various Letters of Advice	Fisheries and Oceans Canada	No Expiry
Licence to Fish for Scientific Purposes and Animal Use Protocol ¹	S-18/19-1026-NU, S-19/20-1037-NU, FWI-ACC-2018-36	Fisheries and Oceans Canada	30-Sept-19
Navigable Waters - Crossings	8200-07-10273, 10267, 10269, 10268, 10274, 10272, 10266, 10271	Transport Canada	Until work completed
Marine Facility	4306-2-6- P/B	Transport Canada	24-June-20
Scientific Permit ²	02 001 19N-M	Government of Nunavut	31-Dec-19
Scientific Permit ³	02 010 19R-M	Government of Nunavut	31-Dec-19
Factory Licence ⁴	F1-076068/E	National Resources Canada	-

NOTE:

¹ Held by Minnow Environmental Inc. and North/South Consulting for Licence to Fish for Scientific Purposes associated with the Project

² Held by Knight Piésold for performance of IQ and Traditional Harvest Studies associated with the Project

³ Held by Baffinland for data collection and analysis for environmental monitoring and management with the Project

⁴ Held by Dyno Nobel, the explosives contractor on behalf of the Project

SECTION 3.0 - ANNUAL SCOPE OF OPERATIONS AND WORK

Table 3-1 below provides a description of Baffinland's proposed operation and work for 2020, with an emphasis on changes from the previous year, and the anticipated effects that this work would have on the Property and the infrastructure of the mine.

While the activities outlined in this 2020 Work Plan represent planned works, improvements, infrastructure and equipment required to execute the currently approved phase of the project, it is anticipated that additional approvals from the NIRB, NWB, QIA, and DFO will be required for select activities, and may include;

- Amendments to the Project Certificate No. 005 and Type 'A' Water Licence 2AM-MRY1325 as a result of the Phase 2 Project;
- Modifications to the existing Type 'A' Water Licence 2AM-MRY1325;
- An Options Exercise Notice (OEN) to modify the boundaries of the Commercial Lease, or to reclassify lands in accordance the terms and conditions of the Commercial Lease;
- A Tote Road Adjustment Notice (TRAN) for changes to the alignment, grade or design of the Tote Road as described in the Lease Operations Guide for the Tote Road Adjustment Notice and in accordance with the terms and conditions of the Commercial Lease;
- Quarry Management Plans (QMPs) will be required for the newly proposed quarries in 2020. Additionally, existing plans may need to be revised to reflect changes in the quarry footprint proposed for 2020; and,
- Authorization or Letter of Advice from DFO for fish habitat.

Where required, these additional approvals have been indicated in Table 3-1 for each activity. For clarity, the activities planned for 2020 that are associated with the Phase 2 proposal have been separated into the following categories;

- Pre-Phase 2 Approvals; Work is consistent with the scope of the Approved Project as described in the Final Environmental Impact Statement (FEIS) and FEIS Addendum for the Early Revenue Phase and are reasonably anticipated to be required during the course of operation of the Project; and
- Post-Phase 2 Project Certificate Amendment; Work that is described in the Phase 2 Project proposal but does not require a Water Licence Amendment. Work considered in this section of Table 3.1 does not require a Water Licence Amendment to proceed as it does not result in the use of water, or the containment, withholding, diversion or retaining of waters or wastes.

As reclamation security will be assessed for Phase 2 in accordance with the approval process for the Phase 2 Type 'A' Water Licence amendment, these activities have been omitted from the Work Plan to avoid duplication of effort through the review of these activities.

Table 3-1: Scope of Work for 2020

Item No.	Property Section	Land Use Area	Approximate Location	Description	Description of Effect on Feature(s)	Anticipated Completion Year	Required Permit or QIA Applications	Other Information
	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
Scope of Work for 2020 – Pre-Project Certificate Approval								
1	Mine Site	Impact Area	N7913348 E561121	Installation of fuel line and associated piping between the mine site fuel storage areas and gensets. Total of 250m pipe.	Minor leveling and grading within Potential Development Area.	2020	Security	IFCs
2	Mine Site	Impact Area	N7913321 E560631	Installation of a mine dry facility at the Sailivik Camp.	No effect, will be placed on developed laydown within Potential Development Area	2020	Security	Layout Drawings
3	Mine Site / Milne Port	Impact Area	(A) Mine Site - N7914780 E558420 (B) Milne Port - N7975973 E503774	Installation of two (2) new waste incineration units; one (1) at the Mine Site, one (1) at Milne Port	No effect, will be placed on developed laydown within Potential Development Area	2020	Security Water Licence Modification	IFCs
4	Mine Site	Impact Area	N7916800 E563270	Construction of a new sedimentation pond at the Waste Rock Facility. Pond will be lined and have an approximate footprint of 50,000 m ² .	Leveling and grading within Potential Development Area	2020	Security Water Licence Modification	IFCs
5	Mine Site	Impact Area	N7916744 E563228	Expansion of the Waste Rock Facility Water Treatment Plant to include an additional geotube settling containment area. Total footprint of new lined area is 3,000 m ³ .	Leveling and grading within Potential Development Area	2020	Security Water Licence Modification	IFCs
6	Mine Site	Impact Area	N7915730 E563348	Installation of a hard line for transfer of water from Deposit 1 to the Waste Rock Facility sedimentation pond. Hard line will replace current use of layflat hose. Total length of line is 3,500 m.	Positive environmental effect, focus on improving water management and reduction of spill potential. Minor leveling and grading with the Potential Development Area	2020	Security Water Licence Modification	IFCs
7	Mine Site	Impact Area	N7915529 E564028	Construction of a sedimentation pond at the Mine Haul Road to manage surface water runoff. Pond will be lined and have a footprint of 10,000 m ² .	Leveling and grading within Potential Development Area	2020	Security Water Licence Modification	IFCs
8	Mine Site	Impact Area	N7914428 E563192	Implementation of a water management plan for Deposit 1, including berms and ditching to manage surface water.	Leveling and grading within the ultimate limit of Deposit 1	2020	None	IFCs

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	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
9	Mine Site	Impact Area	N7913203 E561491	Construction of concrete pad apron exterior to the HD Shop. Total footprint of 1,020 m ² .	No effect, will be placed on developed laydown within Potential Development Area	2020	Security	Layout Drawings
10	Mine Site	Impact Area	N7913312 E561706	Expansion of the area east of the Mine Site workshops and mine haul road for improved traffic management. Additional footprint of 18,000 m ² .	Leveling and grading within Potential Development Area	2020	Security	Layout Drawings
11	Mine Site	Impact Area	(A) KM 104 - N7916450 E562500 (B) Mine Site - N7911913 E561737 (C) Milne Port - N7967739 E511181	Expansion of the explosive magazines storage area at Km 104 (8,000 m ²) and heated storage facilities (400 m ² each) for emulsion truck parking at Mine Site (1,600 m ² disturbed) and Milne Port (27,700 m ² disturbed).	Leveling and grading within Potential Development Area	2020	Security	Layout Drawings
12	Mine Site	Impact Area	(A) HD Shop - N7913209 E561467 (B) MR Shop - N7913295 E5612525 (C) Wash Bay - N7913213 E561645 (D) 110 Laydown - N7915177 E563454	Construction of a waste containment cells exterior to workshop facilities, for temporary storage of materials prior to longer term storage in the Hazardous Waste Berms and eventual backhaul. HD Shop - 72 m ² MR Shop - 120 m ² Wash Bay - 120 m ² 110 Laydown - 144 m ²	Lined area on developed laydown within the Potential Development Area	2020	Security Water Licence Modification OEN	IFCs
13	Mine Site	Impact Area	N7915503 E563241	Additional maintenace facilities at the KM110 laydown to support maintenance of Deposit 1 equipment. Facilities include two heated structures for mobile equipment storage (60 m ² and 120 m ²), a concrete pad for tire maintenance (60 m ²), and welding shop (540 m ²).	No effect, will be placed on developed laydown within Potential Development Area	2020	Security	Layout Drawings
14	Mine Site	Impact Area	N7913336 E561455	Installation of new trailers/offices and environmental lab in camp area, and new trailer/Dry in crushing area.	No effect, will be placed on developed laydown within Potential Development Area	2020	Security	Layout Drawings
15	Mine Site	Impact Area	N7914047 E559584	Expansion of the warehouse laydown area for additional storage of seacans and equipment. Total area of 3,200 m ² .	Leveling and grading within Potential Development Area	2020	Security	Layout Drawings
16	Mine Site	Impact Area	N7914137 E559330	Installation of permanent lighting for port and logistics. Total of 600 m of electrical cabling.	No effect, will be placed on developed laydown within Potential Development Area	2020	Security	Layout Drawing
17	Milne Port	Port	N7975343 E503420	New thaw and wash bay facility for mobile vehicle maintenance. Footprint of 1,250 m ² .	No effect, will be placed on developed laydown within Potential Development Area	2020	Security	Layout Drawings
18	Milne Port	Port	N7976186 E503506	Warehouse/parts staging area facility upgrades, including a new seacan tent building with a footprint of 540 m ² .	No effect, will be placed on developed laydown within Potential Development Area	2020	Security	Layout Drawings

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	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
19	Milne Port	Port	N7975294 E503444	Construction of a waste containment cell exterior to workshop facilities, for temporary storage of materials prior to longer term storage in the Hazardous Waste Berms and eventual backhaul. Port Shop - 72 m ² .	Lined area on developed laydown within the Potential Development Area	2020	Security Water Licence Modification OEN	Layout Drawings
20	Tote Road	Impact Area	Various	Continued work to repair and replace culverts along the Tote Road, including those with identified fish passage issues. All culverts will be repaired or replaced to the 2013 Hatch design.	Positive environmental effect, focus on improving water management and fish passage	2020	None - Security in Place	N/A
21	Tote Road	Impact Area	(A) KM 26 - N7959689 E518576 (B) KM 80 - N7922308 E542130	Addition of washroom facilities/refuge stations at KM26 and KM80 IT Towers.	Minor leveling and grading within Potential Development Area.	2020	Security	Layout Drawings
22	Tote Road	Impact Area	(A) LD-1 - N7974598 E504031.7 (34,300 m ²) (B) LD-5 - N7971792 E505809.5 (11,700 m ²) (C) LD-6 - N7971592 E506308.6 (14,500 m ²) (D) LD-7 - N7967353 E510801.9 (10,500 m ²) (E) LD-8 - N7965208 E514586.3 (82,000 m ²) (F) LD-9 - N7961896 E517314.1 (16,300 m ²) (G) LD-10 - N7953050 E521698.1 (6,400 m ²) (H) LD-11 - N7945107 E522987 (3,900 m ²) (I) LD-13 - N7932775 E527204.4 (10,100 m ²) (J) LD-14 - N7932595 E527169.2 (9,600 m ²) (K) LD-15 - N7928987 E528177.1 (28,800 m ²) (L) LD-17 - N7929018 E528353.3 (37,200 m ²) (M) LD-19 - N7928223 E528375 (25,000 m ²) (N) LD-20 - N7916986 E528571 (35,300 m ²) (O) LD-21 - N7921431 E540500.9 (19,800 m ²) (P) LD-22 - N7921907 E542504.3 (24,700 m ²) (Q) LD-23 - N7921484 E542998.7 (15,500 m ²) (R) LD-24 - N7921431 E543185.7 (3,400 m ²) (S) LD-25 - N7919695 E547057.5 (17,400 m ²) (T) LD-26 - N7914864 E554770.8 (25,000 m ²) (U) LD-27 - N7914686 E555311.4 (28,200 m ²) (V) LD-28 - N7915289 E556192.5 (17,400 m ²) (W) LD-29 - N7914997 E558173.9 (14,600 m ²) (X) LD-30 - N7913726 E560009.9 (23,300 m ²) (Y) LD-31 - N7913354 E560886.5 (13,900 m ²) (Z) LD-32 - N7913258 E560829.4 (17,200 m ²) (AA) R3 Expansion - N7972423 E505189 (73,275 m ²)	Development of twenty-six (26) laydowns adjacent to the Tote Road for material stockpiling and storage. Laydowns will be constructed of 500 mm thick quarried rock with granular surfacing, and free draining.	Leveling and grading within Potential Development Area	2020	Security OEN	Layout Drawings

Item No.	Property Section	Land Use Area	Approximate Location	Description	Description of Effect on Feature(s)	Anticipated Completion Year	Required Permit or QIA Applications	Other Information
	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
23	Tote Road	Impact Area	(A) PQ2 - N7926119 E527843 (187,738 m2) (B) Q27 - N7923196 E527160 (110,000 m2) (C) Q42 - N7912660 E561672 (70,000 m2) (D) PQ5A - N7938861 E525359 (230,000 m2) (E) PQ9A - N7920451 E527512 (90,000 m2) (F) PQ9B - N7920446 E527652 (30,000 m2) (G) PQ10B - N7917633 E531977 (100,000 m2) (H) PQ13 - N7923675 E542584 (460,000 m2) (I) PQ14B - N7917407 E550988 (110,000 m2) (J) PQ15A - N7915621 E555856 (90,000 m2) (K) PQ15B - N7915580 E555270 (70,000 m2) (L) PQ4B - N7941891 E523628 (130,000 m2) (M) PQ5B - N7937814 E525986 (580,000 m2) (N) PQ6B - N7928993 E528901 (230,000 m2) (O) PQ10A - N7917528 E531565 (130,000 m2) (P) PQ12B - N7921782 E539876 (200,000 m2) (Q) PQ14A - N7917828 E550825 (50,000 m2) (R) PQ2B - N7961972 E517663 (240,000 m2) (S) P2 - N7927792 E528496 (80,000 m2)	Development and expansion of quarries, consisting of; nineteen (19) new quarries with 8 m wide access roads.	Leveling and grading within Potential Development Area	2020	Security Quarry Management Plans OEN	IFCs
24	Tote Road	Impact Area	N7928978 E528394	Contractor offices, garages and workshops installed on LD-15.	No effect, will be placed on developed laydown within Potential Development Area	2020	Security	Layout Drawings

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	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
Scope of Work for 2020 – Post-Project Certificate Approval								
25	Northern Transportation Corridor	Impact Area	(A) Access Road # 8 N7969297 E508433(1,993 m2) (B) Access Road # 10 N7967092 E511899(1,686 m2) (C) Access Road # 11 N7966368 E513452(1,871 m2) (D) Access Road # 13 N7964026 E515251(2,969 m2) (E) Access Road # 14 N7962230 E517078(1,784 m2) (F) Access Road # 15 N7961140 E518043(16,883 m2) (G) Access Road # 18 N7955315 E520875(2,027 m2) (H) Access Road # 19 N7954685 E521307(1,481 m2) (I) Access Road # 20 N7953657 E521645(1,750 m2) (J) Access Road # 22 N7952168 E521800(1,400 m2) (K) Access Road # 23 N7951626 E521937(2,215 m2) (L) Access Road # 24 N7949482 E521764(2,241 m2) (M) Access Road # 26 N7947121 E522503(3,121 m2) (N) Access Road # 27 N7945575 E522751(2,090 m2) (O) Access Road # 28 N7944802 E523193(2,052 m2) (P) Access Road # 29 N7943298 E523343(2,548 m2) (Q) Access Road # 32 N7940436 E524160(3,054 m2) (R) Access Road # 33 N7939046 E524963(1,909 m2) (S) Access Road # 34 N7938433 E525354(12,378 m2) (T) Access Road # 36 N7935442 E526828(21,106 m2) (U) Access Road # 37 N7934959 E526872(5,241 m2) (V) Access Road # 38 N7933761 E527063(2,506 m2) (Q) Access Road # 40 N7932185 E527300(9,973 m2) (X) Access Road # 41 N7931722 E527210(3,221 m2) (Y) Access Road # 43 N7930177 E527702(1,370 m2) (Z) Access Road # 46 N7919035 E536803(100,444 m2) (AA) Access Road # 48 N7920772 E539715(30,076 m2) (AB) Access Road # 49 N7921682 E541000(3,392 m2) (AC) Access Road # 58 N7915200 E553389(24,462 m2) (AD) Access Road # 62 N7915177 E557651(893 m2) (AE) Access Road # 64 N7914834 E558433(13,861 m2) (AF) Access Road # 66 N7914526 E558957(11,983 m2) (AG) Access Road # 67 N7914340 E559250(2,477 m2) (AH) Access Road # 68 N7914064 E559644(13,321 m2) (AI) Access Road # 69 N7913896 E559885(1,979 m2) (AJ) Access Road # 70 N7913726 E560234(1,970 m2) (AK) Access Road # 73 N7913338 E560847(2,551 m2)	These access roads have an interface with a waterbody. Construction of access roads to adjacent rail alignment. This activity includes the grading, leveling and compaction of fill material for the construction of access roads that will connect the rail alignment with the existing Tote Road. Local rock quarries shall be utilized for all base and fill materials.	Minor to moderate leveling and grading within Potential Development Area.	2020	Security Phase 2 Project Certificate	Layout Drawings
26	Mine Site	Impact Area	N7913446 E561080	Construction of one (1) arctic diesel fuel tank (Tk6) with 15ML capacity, and associated fuel piping. The fuel tank will be constructed on a pad within the existing Mine Site fuel storage facility.	No effect, will be placed on developed lined containment facility within Potential Development Area	2020	Security Phase 2 Project Certificate	IFCs

Item No.	Property Section	Land Use Area	Approximate Location	Description	Description of Effect on Feature(s)	Anticipated Completion Year	Required Permit or QIA Applications	Other Information
	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
27	Milne Port	Impact Area	N7975731 E504637	Construction of service access road circling around the rail alignment and terminating at KM 0.	Leveling and grading within the revised Potential Development Area	2020	Security Phase 2 Project Certificate OEN	IFCs
28	Milne Port	Impact Area	(A)N7974894 E503434 (B)N7974963 E503800	Foundation excavation for future material handling infrastructure. Car dumper and reclaim tunnel basement with precast concrete footings (2,235 m2) and a new disturbed area (15,300 m2), and Conical Stockpile tunnel with precast concrete footings (1,040 m2) on existing disturbed area.	Excavation, leveling and grading within the Potential Development Area.	2020	Security Phase 2 Project Certificate	IFCs
29	Tote Road	Impact Area	(A) Km 1.992 - N7974232 E504070 (B) Km 9+460 - N7968767 E508869 (C) Km 12+420 - N7967205 E511246 (D) Km 23+286 - N7959869 E518477 (E) Km 55+343 - N7930406 E527623 (F) Km 86+941 - N7921378 E543209 (G) Km 91+750 - N7919838 E546889 (H) Km 95+957 - N7917490 E550623	Realignment of the Tote Road for a safe level crossing point over future rail superstructure.	Leveling and grading within the revised Potential Development Area	2020	Security Phase 2 Project Certificate TRAN OEN	IFCs
30	Tote Road	Impact Area	(A) Km 13 - N7967458 E512157 (B) Km 52.4 - N7963600 E527390 (C) Km 59.3 - N7927785 E528383 (D) Km 75.7 - N7921938 E540698	Installation of pre-fabricated explosives magazine to store packaged explosives, detonators and charges.	Leveling and grading within the revised Potential Development Area	2020	Security Phase 2 Project Certificate OEN NRCAN	IFCs
Work Carried over from 2019 & Prior – Security in Place								
2019-1	Rail/ Tote Road/ Milne Port	Impact Area	(A) Q1 - N7974810 E503970 (B) Q5 - N7972300 E506000 (650,000 m2) (C) PQ2A - N7955289 E522130 (345,500 m2) (D) PQ4A - N7942972 E523552 (105,000 m2) (E) PQ6A - N7929733 E528240 (194,000 m2) (F) PQ12A - N7920935 E539158 (232,300 m2)	Development and expansion of quarries, consisting of; four (4) new quarries along the Tote Road with 8m wide access roads, expansion of previously proposed but not constructed quarry Q5, and expansion of the working limits of existing quarry Q1.	Leveling and grading within Potential Development Area and Tote Road	2020	Quarry Management Plans	Surveys
2019-2	Rail/Tote Road	Impact Area	(A) Laydown 4 - N7960605 E518164 (66,300 m2) (B) Laydown 7 - N7940427 E524119 (28,900 m2) (C) Laydown 9 -N7929681 E527833 (92,500 m2) (D) Laydown 10 - N7921358 E540249 (34,500 m2) (E) Laydown 13 - N7915170 E557599 (7,000 m2)	Development of six (6) laydowns adjacent to the existing Tote Road for material stockpiling and storage. The laydowns will be constructed by filling directly over undisturbed ground and 31m away from the high water mark of local water bodies. The laydowns will be constructed of 500 mm thickness quarried rock with granular surfacing, free draining to appropriate ditches and water courses. Laydown 2 completed in 2019.	Leveling and grading within Potential Development Area	2020	OEN (Approved)	Layout Drawing
2019-3	Tote Road	Impact Area	(A) KM8 N7971327 E506536 (B) KM97 N7914750 E554750	Grade adjustments at KM8 and KM97 to improve safety and drainage. No new culvert installations required.	Leveling and grading within Potential Development Area.	2020	TRAN	IFCs

Item No.	Property Section	Land Use Area	Approximate Location	Description	Description of Effect on Feature(s)	Anticipated Completion Year	Required Permit or QIA Applications	Other Information
	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
2019-6	Milne Port	Impact Area	N7975763 E502984 (155,000 m2)	Expansion of the Milne Port Ore Stockpile and water management facilities to optimize stockpiling and shiploading operations, resulting in additional 140,000 m2 of stockpile area and 15,000 m2 lined sedimentation pond.	Leveling and grading within Potential Development Area	2020	Water Licence Modification No. 12 (Approved)	IFCs
2019-7	Milne Port	Impact Area	N7974938 E503109 (6,000 m2)	Construction of berm and linear steel support structure on laydown LP3 for receipt and storage of stacker/reclaimer equipment. Berm dimensions are 200m x 30m x 2m, constructed on existing disturbed area.	No effect, will occur on developed laydown within Potential Development Area	2019	None - on existing disturbed area	Layout Drawing(s)
2019-8	Milne Port	Impact Area	N7976033 E503590 (4,180 m2)	Construction of new polishing waste stabilization pond (PWSP) at 380 Person camp to manage off-spec effluent from the 380p camp waste water treatment plant	No effect, will occur on developed laydown within Potential Development Area	2020	OEN Water Licence Modification	IFCs
2019-9	Milne Port	Impact Area	N7975481 E503779 (2,700 m2)	New contaminated water/snow containment pond adjacent to existing pond at Milne Port	Leveling and grading within Potential Development Area	2020	OEN Water Licence Modification	IFCs
2019-11	Mine Site / Milne Port	Impact Area	(A) Mine Site - N7914539 E558228 (360 m2) (B) Milne Port - N7976251 E503915 (360 m2)	Construction of new hazardous waste berm at the Mine site and at Milne Port. Decommissioning of select existing berms to consolidate waste management.	Environmental optimization. Leveling and grading within Potential Development Area	2020	OEN Water Licence Modification	IFCs
2019-12	Mine Site	Impact Area	N7914015 E564007 (91,000 m2)	Laydown area for parking and equipment storage at Km 107.5.	Leveling and grading within Potential Development Area	2020	None	Layout drawing(s)
2019-13	Mine Site	Impact Area	N7915590 E563181 (180,000 m2)	New KM110.5 Laydown for additional equipment storage and maintenance shop installation	Leveling and grading within Potential Development Area	2020	None	Layout drawing(s)
2019-14	Mine Site	Impact Area	N7915590 E563181 (1,500 m2)	Heated maintenance shop for pit equipment at Km 110.5 Laydown. Tent structure with lined floor. Footprint is approximately 1,500 m ² .	No effect, will occur on developed laydown within Potential Development Area	2020	None	Layout drawing(s)
2019-15	Mine Site	Impact Area	N7914500 E558150 (area m2)	Decommissioning and repurposing of Weatherhaven structures for storage and workspace.	No effect, will occur on developed laydown within Potential Development Area	2020	None	None

Item No.	Property Section	Land Use Area	Approximate Location	Description	Description of Effect on Feature(s)	Anticipated Completion Year	Required Permit or QIA Applications	Other Information
	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
2019-16	Mine Site	Impact Area	N7913450 E560450 (12,000 m2)	Expansion of the 800 person camp pad to the north by approximately 12,000 m ² to accommodate additional support offices and buildings.	Leveling and grading within Potential Development Area	2020	None	Layout drawing(s)
2019-17	Mine Site	Impact Area	N7913450 E560450 (925 m2)	Addition of offices/trailers/buildings at the 800p Camp. Total footprint is 925 m ² , including approximately 500 m ² for a new fire hall and emergency response building.	No effect, will occur on developed laydown within Potential Development Area	2019	None	Layout drawing(s)
2019-18	Mine Site	Impact Area	N7912328 E561111 (9,000 m2)	Construction of a landfarm at the Mine Site landfill facility, with an estimated footprint of 9,000 m2. Disturbed area included in 2018 Addendum, new lined area requires security allocation.	Leveling and grading within Potential Development Area. Area already allocated as disturbed.	2020	Water Licence Modification No. 10 (Approved) Security in place Notification to NWB	IFCs
2019-20	Mine Site	Impact Area	N7913446 E561080	Construction of one (1) arctic diesel fuel tank (Tk6) with 15ML capacity, and associated fuel piping. The fuel tank will be constructed on a pad within the existing Mine Site fuel storage facility.	No effect, will be placed on developed lined containment facility within Potential Development Area	2020	Phase 2 Project Certificate	IFCs
2019-21	Mine Site	Impact Area	N7912830 E561787 (12,000 m2)	Upgrades to the mine site crusher facility, including expansion of the crusher pad (12,000 m ²), new water diversion structures, and increase to sedimentation pond (MS-06) capacity (2,000 m ²). Installation of one (1) culvert in northern perimeter ditching to allow for vehicle access to maintenance shop.	Leveling and grading within Potential Development Area	2020	Water Licence Modification	IFCs
2019-23	Mine Site	Impact Area	N7913284 E563431 (133,400 m2)	Construction of a Run of Mine (ROM) Stockpile at KM 106 (previously KM107) (76,600 m2) and sedimentation pond (10,600 m ² disturbed, 7,500 m ² lined).	Leveling and grading within Potential Development Area	2020	Notification to NWB (Completed)	IFCs
2019-25	Milne Port	Impact Area	N7976389 E503422 (4,400 m2)	Installation of East Sedimentation Pond Expansion (2a) approved with Modification No. 9, but for which security has not been allocated.	Leveling and grading within Potential Development Area	2020	Water Licence Modification No. 9 (Approved) Submission of IFC Drawings (Submitted)	IFCs
2018-A1	Mine Site	Impact Area	N7914560 E563904	Construction of the Mine Haul Road Cross Cut, and widening of the existing Mine Haul Road for safety purposes and to permit larger truck traffic	Minor leveling and grading within Potential Development Area	2020	Water Licence Modification No. 7 (Approved) Submission of IFC Drawings (Submitted)	IFCs
2018-27	Milne Port	Impact Area	N7976483 E504119	Relocation of effluent discharge point to barge offload area	Positive effect. Reduced environmental spill risk.	2020	Water Licence Modification No. 7 (Approved)	IFCs

Item No.	Property Section	Land Use Area	Approximate Location	Description	Description of Effect on Feature(s)	Anticipated Completion Year	Required Permit or QIA Applications	Other Information
	<i>e.g. Milne Inlet/Tote Road/Mine Site</i>	<i>e.g. Impact Area /Exploration Area</i>	<i>Approximate UTM (if known) (Zone 17W)</i>	<i>Provide a detailed description of the activity.</i>	<i>A description of how the feature(s) (topographical and/or manmade) will be affected</i>	<i>N/A</i>	<i>List any associated permit applications if applicable.</i>	<i>e.g. Issued for construction documentation</i>
2018-28	Milne Port	Impact Area	N7976491 E504122	Marine manifold building relocation - moving from current location north of fuel tank farm to upgraded freight dock location	Positive effect. Reduced environmental spill risk.	2020	Water Licence Modification No. 7 (Approved)	Layout drawing
Progressive Reclamation								
-	Milne Port	-	N7975568 E503745	Management of hydrocarbon impacted soils within the existing landfarm facility.	N/A	Ongoing	N/A	N/A
-	Milne Port	-	N/A	Demobilization of equipment and supplies not required for near term activities as well as current inventory of hazardous waste and other materials by means of sealift from Milne Port	N/A	2018	N/A	N/A
-	Milne Port and Mine Site	-	N/A	Discharge and treatment of residual treated sewage effluent stored in PWSP at Mary River Exploration Camp and Milne Port Site.	N/A	Ongoing	N/A	N/A
-	Tote Road	-	N/A	Continue the development and implementation of a long term multi-year plan to address localized areas of permafrost degradation associated with the current borrow areas including KM97, and the area	N/A	Ongoing	N/A	N/A
-	Tote Road	-	N/A	Reclamation of sections of the exploration phase Tote Road no longer in use by means of scarifying and culvert removals.	N/A	Ongoing	N/A	N/A
-	Mine Site	-	N7912845 E560922	Continued development of the Mine Site landfill and deposition of non-hazardous waste in accordance with the Landfill Maintenance and Operations Manual	N/A	Ongoing	N/A	N/A
-	Site Wide	-	N/A	Ongoing removal from site, or safe disposal on-site of infrastructure, equipment and supplies no longer required for ongoing construction and operations.	N/A	Ongoing	N/A	N/A
-	Site Wide	-	N/A	Unless otherwise identified within the approved interim Closure and Reclamation Plan, where roads are no longer in use - removal of culvert and open/restore the natural drainage channel. Measures will be taken to minimize erosion and sedimentation	N/A	Ongoing	N/A	N/A
-	Site Wide	-	N/A	Areas that have been contaminated by hydrocarbons from normal fuel transfer, handling and storage activities will be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation 2010. Use of reclamation soils for purpose of back fill or general site grading may be carried out with approval of applicable inspectors and agencies.	N/A	Ongoing	N/A	N/A

NOTES:

- Two (2) of the seven (7) laydowns for the Milne Port area will require a Water Licence Modification. Based on direction from NWB, these have been included as Category 1 activities such that securities can be assessed. Work on these two (2) laydowns will not commence until the applicable regulatory approval is granted.
- Modification of the Waste Rock Sedimentation Pond (MS-08) is required to address uncontrolled discharge of non-compliant water. An action plan and revised mitigation design has not been finalized at this time, however this work item has been included such that a security estimate for reclamation can be prepared, and will be revised and reconciled following implementation of any revised structures or mitigation measures.
- An Options Exercise Notice is required to revise the boundaries of the lease area. Work on the select locations requiring an OEN will not commence until approval from QIA is granted.

3.1 INFRASTRUCTURE LAYOUT AT END OF 2020

Site layouts for Milne Port, Tote Road, and Mary River Mine Site can be found in Appendix A of this document.

SECTION 4.0 - MINING AND EXPLORATION ACTIVITIES

4.1 EXPLORATION ACTIVITIES AND DRILLING PLANS

The scope of Baffinland's Type 'B' Licence (2BE-MRY1421) and Commercial Lease with QIA allows for Baffinland to continue/undertake the exploration activities and drilling programs on its mineral leases in the Qikiqtani Region of Nunavut. This includes the exploration land use areas as defined in Section 2.2 of Commercial Lease. The types of exploration activities planned for 2019 are included within the scope of the Type 'B' Water Licence, with the exception the Ege Bay exploration program which holds a separate Type 'B' Water Licence (2BE-EQE1926) for the operation of the exploration camp and activities.

At this time when the Work Plan is required to be submitted, the exploration and drilling programs for 2020 have not yet been finalized. However, as a minimum, activities will include:

- Drilling
- Mapping
- Sampling
- Geophysical and geochemical surveys.

Operation of the Steensby Inlet Camp and Mid Rail Camp are not at this time anticipated to be required during 2020. A new exploration camp at the Ege Bay location is being evaluated, and Baffinland has engaged QIA in a new land lease for this camp.

It is anticipated that exploration activities will continue in 2020 with a drilling program on Deposits 1, 2, and 3. Once proposed drilling locations are finalized, this information will be provided to QIA, NWB, CIRNAC, and others.

4.2 AMOUNT AND TYPE OF ORE AND WASTE TO BE MINED

An estimate of the breakdown of ore vs. waste mined from Deposit No. 1 by month during 2019 is provided in Table 4-1 below. Note that the volume of ore to be mined is contingent on the approval of the Phase 2 Project, and is subject to change based on the outcome of the Project Certificate amendment.

Table 4-1: Mine Forecast 2020

Month	Ore Mined (wmt)	Waste Mined (wmt)	Total Mined (wmt)
January	720,403	547,805	1,625,693
February	775,000	564,399	1,468,368
March	775,000	711,323	1,625,693
April	1,108,867	288,957	1,573,251
May	877,912	756,818	1,625,693
June	930,318	877,251	1,573,251
July	1,119,685	611,315	1,625,693
August	820,608	884,343	1,625,693
September	987,306	607,576	1,573,251
October	802,393	1,027,810	1,625,693
November	741,680	935,687	1,573,251

Month	Ore Mined (wmt)	Waste Mined (wmt)	Total Mined (wmt)
December	525,000	1,461,617	1,625,693
Total	10,184,172	9,274,900	19,141,225

4.3 AMOUNT AND TYPE OF ORE TO BE SHIPPED EACH MONTH

Ore shipping during 2020 will occur during the open water season from end of July to approximately mid-October. The expected total shipping quantities for 2020 are shown in Table 4-2 below. Note that the forecasted volume of ore to be shipped outlined in the below table is contingent on the approval of the Phase 2 Project, and is subject to change based on the outcome of the Project Certificate amendment process.

Table 4-2: Ore Shipping Forecast 2020

	Lump Ore Shipped (wmt)		Fines Shipped (wmt)		Total Shipped (wmt)	
Month	Milne Inlet	Steensby Inlet	Milne Inlet	Steensby Inlet	Milne Inlet	Steensby Inlet
January	-	-	-	-	-	-
February	-	-	-	-	-	-
March	-	-	-	-	-	-
April	-	-	-	-	-	-
May	-	-	-	-	-	-
June	-	-	-	-	-	-
July	750,000	-	-	-	750,000	-
August	975,000	-	1,350,000	-	2,325,000	-
September	975,000	-	1,375,000	-	2,350,000	-
October	300,000	-	275,000	-	575,000	-
November	-	-	-	-	-	-
December	-	-	-	-	-	-
TOTAL	3,000,000	-	3,000,000	-	6,000,000	-

4.4 SPECIFIED SUBSTANCES TO BE QUARRIED AND EXPECTED USES

A summary of the expected quantities of quarried and borrow materials to be extracted during 2020 are provided in Table 4-3, below. The expected quarterly quantities of each specified substance per quarry site and borrow location is provided also in Table 4-3, below. Note that quarry volumes are subject to change based on timeline for additional Quarry Management Plan submission and approval.

Table 4-3: 2020 Quarry and Borrow Pit Quantities

Quarry Summary	Km Location	Permitted	Q1	Q2	Q3	Q4	Total	Estimated Surface Area Increase	Estimated Breakdown Of Specified Substances
UNITS			m ³	m ³	m ³	m ³	m ³	m ²	
Q1	1	Permitted	55,000	25,000	25,000	25,000	130,000	438,633	Rock
Q7	7	Permitted	-	-	-	-	0	0	Rock
Q11	21	Permitted	-	-	-	-	0	0	Rock
Q19	93.5	Permitted	-	-	-	-	0	0	Rock
QMR2	102	Permitted	37,500	37,500	87,500	87,500	250,000	283,652	Rock
Km 2	2	Permitted	-	-	-	-	0	0	Granular
Km 97	97	Permitted	25,000	25,000	25,000	25,000	100,000	159,512	Granular
Q5	4	Proposed	150,000	500,000	450,000	450,000	1,550,000	246,840	Rock
PQ2A	28.9	Proposed	15,000	60,000	85,000	-	160,000	113,918	Rock
PQ4A	41.6	Proposed	10,000	80,000	70,000	20,000	180,000	113,918	Rock
PQ6A	56.2	Proposed	10,000	150,000	100,000	50,000	310,000	239,754	Rock
PQ12A	84.5	Proposed	-	-	50,000	50,000	100,000	259,755	Rock
PQ2B	22.0	Proposed	15,000	50,000	80,000	15,000	160,000	236,600	Rock
PQ4B	42.5	Proposed	10,000	30,000	60,000	80,000	180,000	129,463	Rock
PQ5A	45.7	Proposed	-	80,000	80,000	50,000	210,000	229,487	Rock
PQ5B	46.8	Proposed	30,000	150,000	150,000	170,000	500,000	570,629	Rock
PQ6B	57.1	Proposed	-	114,000	150,000	150,000	414,000	227,187	Rock
P2	58.0	Proposed	-	-	30,000	-	30,000	79,524	Granular
PQ2	61.0	Proposed	-	-	50,000	-	50,000	187,738	Rock
Q27	63.4	Proposed	-	-	40,000	40,000	80,000	106,025	Rock
PQ9A	66.0	Proposed	-	10,000	80,000	80,000	170,000	69,960	Rock
PQ9B	66.0	Proposed	-	-	30,000	45,000	75,000	22,972	Rock
PQ10A	73.1	Proposed	-	-	30,000	45,000	75,000	121,274	Rock
PQ10B	74.2	Proposed	-	-	30,000	45,000	75,000	93,271	Rock
PQ12B	84.5	Proposed	-	-	30,000	45,000	75,000	193,089	Rock
PQ13	85.7	Proposed	-	-	50,000	50,000	100,000	460,334	Rock
PQ14B	96.0	Proposed	-	-	-	50,000	50,000	107,257	Rock
PQ14A	96.7	Proposed	-	-	-	50,000	50,000	46,913	Rock
PQ15A	101.5	Proposed	-	-	-	50,000	50,000	87,026	Rock
Total							5,189,000	4,955,200	

Notes:

1. The quantities from each source are approximate values and may vary based on minor changes to the schedule and scope, however, the aggregate volume to be extracted is expected to remain constant.
2. The final schedule for the issuance of Quarry and Borrow Source Management Plans for proposed new quarry and borrow areas is not finalized at the time the Work Plan was prepared.
3. It is noted D1Q1 and D1Q2 will also be used as a source of aggregate in 2018 to support Mine Haul Road maintenance but is not considered a formal quarry as it is located in the Mining Lease and is anticipated to be within the LOM pit extent.

SECTION 5.0 - ANNUAL QUANTITIES OF SOLID WASTE**5.1 SOLID WASTE DISPOSAL**

The expected annual quantity of solid wastes to be deposited during 2020 is established from survey volumes measured in 2015 through 2019, as well as an analysis of proposed activities. Estimated quantities of solid waste to be deposited in approved waste storage areas are shown in the Table 5-1 below.

Table 5-1: Annual Volume of Solid Waste to be Deposited in Waste Storage Areas in 2020

Property Section	Waste Storage Area	Volume of Solid Waste to be disposed of (m ³)
<i>e.g. Milne Port/Tote Road/Mine Site</i>	-	
Mine Site	Landfill	9,000
TOTAL		9,000

SECTION 6.0 - EXPECTED USES OF WATER

6.1 WATER USE

The Type 'A' Water Licence 2AM-MRY1325 Amendment No. 1 permits the following maximum water use for domestic and industrial purposes during construction phase of the Project, as shown in Table 6-1 below. These volumes are subject to change, consistent with the volumes provided in the application for the Type 'A' Water Licence Amendment for Phase 2, following the approval of the amendment to the Water Licence. As per Clause 22 of the QIA-Baffinland Water Compensation Agreement, Baffinland will pay a Consumptive Payment for Water Use, in connection with the Project for the maximum water volume permitted to be used or withdrawn annually as defined in the water licences issued to Baffinland by NWB.

Table 6-1: Approved Water Use for Domestic and Industrial Purposes during Construction Phase

Property Section	Water Source Name	Water Source Location	Annual Volume to be used (m ³)
Milne Port (Milne Inlet)	Phillips Creek (Summer)	71° 52' 53.3" N 80° 56' 04.0" W	134,130 m ³ /year
	Km 32 (Winter)	71° 30' 39.5" N 80° 14' 54.4" W	
Mine Site (Mary River)	Camp Lake	71° 19' 38.6" N 79° 22' 57" W	240,000 m ³ /year
Steensby Port (Steensby Inlet)	ST 347 km Lake	N/A	0 m ³ /year
	3 km Lake	N/A	
TOTAL			371,130 m³/year

Source: Amendment No.1 Type 'A' Water Licence (2AM-MRY1325)

The Amendment No.1 of the Type 'A' Water Licence authorizes Baffinland to withdraw up to 1,500 m³/day to a maximum of 547,500 m³ annually of water specifically for use in dust suppression or control along the Tote Road of the Project. Water for dust suppression or control shall be obtained from the sources in accordance with thresholds established and shown in Table 6-2 below. These volumes and locations are subject to change, consistent with the volumes and locations provided in the application for the Type 'A' Water Licence Amendment for Phase 2, following the approval of the amendment.

Table 6-2: Water Use for Dust Suppression

Property Section	Water Source Name	Water Source Location		Daily Water Take Proposed for Dust Suppression(m ³ /day)	Restrictions
		Latitude	Longitude		
Milne Port	Phillip's Creek	71° 52' 53.3" N	80° 56' 04.0" W	212	None
Milne Port	Km 32 Lake	71° 30' 39.5" N	80° 14' 54.4" W	364	
Tote Road	CV128	71° 47' 35.1" N	80° 36' 41.7" W	579.5	None
Tote Road	CV099	71° 38' 21.7" N	80° 22' 46.6" W	110	June-July only during low flow

Property Section	Water Source Name	Water Source Location		Daily Water Take Proposed for Dust Suppression(m ³ /day)	Restrictions
		Latitude	Longitude		
					(<mean flow) years
Tote Road	CV087	71° 34' 10.0" N	80° 19' 41.6" W	90	June-July only during low flow (<mean flow) years
Tote Road	CV078	71° 31' 51.9" N	80° 16' 07.8" W	75	June-July only during low flow (<mean flow) years
Tote Road	Katiktok Lake	71° 23' 45.7" N	79° 48' 22.0" W	318	None
Tote Road	BG50	71° 26' 29.6" N	80° 10' 27.1" W	150	None
Tote Road	BG32	71° 23' 35.1" N	79° 51' 24.9" W	120	June-July only during low flow (<mean flow) years
Tote Road	CV217	71° 23' 51.4" N	79° 48' 50.9" W	130	None
Tote Road	Muriel Lake	71° 22' 18.5" N	79° 39' 24.3" W	212	None
Tote Road	David Lake	71° 19' 38.6" N	79° 22' 57.0" W	132	June-July only during low flow (<mean flow) years
Tote Road	BG17	71° 21' 19.8" N	79° 34' 44.0" W	75	June-July only during low flow (<mean flow) years
Tote Road	CV223 (Tom River)	71° 19' 40.5" N	79° 26' 15.8" W	135	None
Mine Site	Camp Lake	71° 19' 38.6" N	79° 22' 57" W	86	None

Source: Amendment No.1 Type 'A' Water Licence (2AM-MRY1325)

SECTION 7.0 - MATERIALS TO BE SHIPPED OFF THE PROPERTY

7.1 MATERIALS SHIPPED OUT

As required by the Lease, the expected quantities of materials planned to be shipped off site in 2020 are detailed in Table 7-1 below.

Table 7-1: Materials to be shipped out in 2020

Property Section	Equipment/ Material Item	Owner	Estimated Annual Amount of Equipment and Material (tonne)	Estimated Annual Revenue Tonnes
e.g. Milne Port/Mine Site	Description of the equipment or the material*	e.g. BIM/Third Party	Estimated total annual amount of equipment and material (tonne)	Estimated amount of revenue tonnes assigned to the shipping of equipment or material
Milne Port	Batteries	BIMC	89	-
Milne Port	Hydro Carbon Contaminated Material	BIMC	205	-
Milne Port	Waste Oil	BIMC	1,238	-
Milne Port	Waste Fuels	BIMC	91	-
Milne Port	Waste Grease	BIMC	32	-
Milne Port	Waste Hazardous Liquids	BIMC	401	-
Milne Port	Waste Aerosol Canisters	BIMC	2.5	-
Milne Port	Contaminated Containers/Solids	BIMC	319	-
Milne Port	Misc Hazardous Materials	BIMC	250	-

Note: For hazardous waste assumptions used in the calculation of the quantity of generated hazardous waste for the Project, please refer to the Waste Management Plan (BAF-PH1-830-P16-0028).

SECTION 8.0 - MATERIALS TO BE SHIPPED TO THE PROPERTY

8.1 DELIVERY OF FUEL

At least two bulk fuel deliveries will occur during the 2020 sealift. At the onset of the shipping season, arctic diesel and Jet A fuel will be delivered to fill the tanks at the Milne Port tank farm. The anticipated fuel delivery provided in the below Table 8-1.

Table 8-1: Anticipated Fuel Delivery During 2020

	Diesel	Jet A
Total Bulk Fuel Delivery	93 ML	3 ML

8.2 MATERIALS SHIPPED TO THE PROPERTY

Materials, equipment, supplies, buildings and machinery to support construction and operations through 2020 will arrive on the 2020 sea lift include the following items provided below in Table 8-2.

Table 8-2: Mobile and Mechanical Equipment to be received during 2020

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Mine Site	Feed Convyor	Baffinland	1	230
Mine/Port	GE 16V250 Genset 3500 kw	Baffinland	5	650
Milne Port	Generator 1000 kW	Baffinland	1	30
Milne Port	Conveyors	Baffinland	3	120
Milne Port	Jaw crusher unit	Baffinland	1	90
Milne Port	Screener + Cone crusher unit	Baffinland	1	170
Mine Site	349 Excavator	Baffinland	1	80
Mine Site	908 Loader	Baffinland	2	140
Mine Site	950 Loader	Baffinland	2	140
Mine Site	345 Excavator	Baffinland	1	80
Mine Site	988 loader with forks	Baffinland	1	70
Mine Site	Western Star Tractor	Baffinland	2	23
Mine Site	6060 Shovel	Baffinland	1	200
Mine Site	793 Haul Truck	Baffinland	3	375
Mine Site	992 Loader	Baffinland	1	70
Mine Site	16M Grader	Baffinland	1	70
Mine Site	D10 Dozer	Baffinland	1	70

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Mine Site	374 Excavator	Baffinland	2	80
Milne Port	374F Excavator	Baffinland	4	80
Milne Port	745C truck	Baffinland	5	625
Mine Site	light plant	Baffinland	19	15.2
Milne Port	Light Vehicles (F250 or equiv.)	Baffinland	1	1
Milne Port	Kubota Side by Side	Baffinland	1	8
Milne Port	259B Skid Steer	Baffinland	1	15
Mine Site	Light Vehicles (F350 or equiv.)	Baffinland	28	28
Mine Site	Larue Snow Blower	Baffinland	1	0.5
Mine Site	Skid steer snow blower	Baffinland	2	30
Mine Site	Skid Steer	Baffinland	3	45
Mine Site	Powertraxx Tracked Vehicle	Baffinland	1	0.5
Mine Site	257 Skid steer	Baffinland	2	30
Mine Site	Blaze Cube Frost Fighters	Baffinland	2	1.6
Milne Port	Light Vehicles (F350 or equiv.)	Baffinland	8	8
Mine Site	600kw Generators	Baffinland	2	2
Mine Site	60kw Generator	Baffinland	3	1
Mine /Port	Atlas 1000 mVA Transformers	Baffinland	4	400
Mine Site	24p Passenger Bus	Baffinland	1	20
Mine Site	Fire Truck (4x4)	Baffinland	1	18
Mine Site	740B Water Truck	Baffinland	1	80
Mine Site	F550 Snow Plow	Baffinland	2	2
Mine Site	14M Grader	Baffinland	1	60
Mine Site	Fuel Tanker	Baffinland	1	25
Mine Site	Service/Fuel Truck (F550)	Baffinland	8	8
Mine Site	Jet A Truck	Baffinland	1	15
Mine Site	Cube truck	Baffinland	2	4
Mine Site	740 water truck	Baffinland	1	80
Mine Site	Vac Truck	Baffinland	2	23
Mine Site	48p School Bus	Baffinland	2	20
Mine Site	Steam truck	Baffinland	1	17
Mine Site	Telehandler	Baffinland	1	20
Mine Site	D65 Dozer	Baffinland	1	70

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Mine Site	Track Mounted Drill Rig	Baffinland	2	18
Mine Site	4x4 hotseating bus	Baffinland	2	20
Mine Site	Flat bed boom truck	Baffinland	1	9
Mine Site	CCM200E Concrete Mixer	Baffinland	1	14
Mine Site	Pressure Washing Truck	Baffinland	1	8
Milne Port	D6T Dozer	Baffinland	1	70
Milne Port	Portable C130 Jaw Crusher	Baffinland	3	550
Milne Port	844 Loader	A&B	2	140
Milne Port	CAT 950 loader	A&B	1	70
Milne Port	CAT 988 loader	A&B	1	70
Milne Port	Doosan Compressor - #171-195	A&B	1	3
Milne Port	Generator	A&B	4	32
Milne Port	55KW Generator	A&B	2	8
Milne Port	Air compressors	A&B	11	22
Milne Port	Bear Proof Garbage Bin	A&B	2	0.5
Milne Port	Light plants	A&B	9	7.2
Milne Port	Light Vehicles (GMC)	A&B	8	8
Milne Port	Ballast regulators 940	A&B	1	8
Milne Port	Diesel rail heater Unit #10172	A&B	1	5
Milne Port	F550 Service Truck - Unit #51297	A&B	1	2
Milne Port	Zoom Boom + Man Basket	A&B	1	10
Milne Port	Passenger Vans (15p)	A&B	6	6
Milne Port	Clipping Machine	A&B	2	14
Milne Port	Crew Van 4x4 15 passenger	A&B	3	3
Milne Port	Diesel Rail Heater Drapeau 2	A&B	1	6
Milne Port	Diesel rail heaters	A&B	2	12
Milne Port	Light Vehicles (F350 or equiv.)	A&B	10	10
Milne Port	Geismar Power Jack Model RV100	A&B	1	4
Milne Port	Herman Nelson 6700	A&B	3	3
Milne Port	Herman Nelson extreme cold BT400NEX-D4A	A&B	4	4
Milne Port	Herman Nelson Flagro-1000 trailer mount	A&B	1	1
Milne Port	MPR rail threaders	A&B	6	6
Milne Port	Pickup trucks	A&B	29	29

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Milne Port	Skidsteer	A&B	1	15
Milne Port	Tie Spacing Optimizer	A&B	4	4
Milne Port	Towable generators	A&B	10	7
Milne Port	10T Hi Rail Boom Truck	A&B	1	4
Milne Port	Speedswing with magnet	A&B	1	12
Milne Port	544 Loader	A&B	11	770
Milne Port	744 Loaders	A&B	2	140
Milne Port	JOHN DEER 245G Excavator	A&B	1	80
Milne Port	JOHN DEERE LOADER 744K UNIT#30356	A&B	1	70
Milne Port	Mark IV tampers	A&B	1	8
Milne Port	Nordco Clipping Machine	A&B	2	26
Milne Port	Pettibone Speedswings, Wide Axle	A&B	1	24
Milne Port	Scissor Neck Rail trailers	A&B	1	14
Milne Port	Tower Light	A&B	2	1.6
Milne Port	Trombone trailers	A&B	5	20
Milne Port	Western Star Fuel Truck	A&B	1	18
Milne Port	Western Star Tandem Tractor	A&B	4	68
Milne Port	Ballast Car	A&B	40	920
Milne Port	Ballast conveyor	A&B	4	160
Milne Port	Ballast regulators	A&B	3	135
Milne Port	Car movers	A&B	2	140
Milne Port	Excavator	A&B	5	80
Milne Port	F-550 Mechanic Truck	A&B	1	2
Milne Port	Flashbutt weld trucks	A&B	2	4
Milne Port	Fuel truck	A&B	1	9
Milne Port	highway trailer 40 foot lowbed	A&B	1	4
Milne Port	highway trailer 48 foot	A&B	1	5
Milne Port	Hi-Rail boom truck	A&B	1	14
Milne Port	Kennworth 880 Dump Truck w/ hirail	A&B	1	7
Milne Port	Kennworth 880 w/ winch	A&B	1	8
Milne Port	Kennwoth 370 fuel & lube truck (filled)	A&B	1	8
Milne Port	Knox Kershaw KBR 940 Regulator	A&B	1	18
Milne Port	Mark IV Tamper	A&B	4	30

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Milne Port	Mechanics trucks	A&B	1	1
Milne Port	Pettibone 445F w/ high rail	A&B	1	24
Milne Port	Rail car mover	A&B	1	1
Milne Port	Rail deck trailer	A&B	3	6
Milne Port	Speedswings	A&B	4	96
Milne Port	Tandem tractors	A&B	8	8
Milne Port	Telehandler	A&B	1	20
Milne Port	Track Welding Truck	A&B	1	1
Milne Port	Trombone trailers	A&B	6	6
Milne Port	Bridge Crane 55'	ADCO	1	60
Milne Port	400T AT-LTM 1400-7.1 - CRANE - Unit #2259 (Orange)	AECON	1	80
Milne Port	400T AT-LTM 1400-7.1 - LTM 1350 CRANE (Orange)	AECON	1	80
Milne Port	Cat 938K Loader	AECON	1	70
Milne Port	LR1300 Crawler Crane -Unit #2617 (Bleu)	AECON	1	40
Milne Port	TADANO RR1600XL CRANE	AECON	2	70
Milne Port	Doosan 900HP Compressors	AECON	6	6
Milne Port	Light Vehicles (F350 or equiv.)	AECON	5	5
Milne Port	Mammoet Frost Fighter Trailer - #601667	AECON	1	4
Milne Port	Man lift - JLG 12000SJP - SN#0300247528	AECON	7	16
Milne Port	BG20H - Pile Driver - #2780	AECON	1	21
Milne Port	Cat 420F2 Loader - HWD03696	AECON	1	70
Milne Port	Ford Fuel truck	AECON	1	2
Milne Port	Telehandler - JCB-512-56S -	AECON	3	20
Milne Port	Truck trailers	AECON	2	5
Milne Port	Light Vehicles (F350 or equiv.)	AllNorth	2	2
Milne Port	Pick-up Truck F250 with Crew cab with Class 1 Blaster box	Dyno Nobel	1	1
Milne Port	Bulk emulsion truck - Unit# RC-908	Dyno Nobel	1	3
Milne Port	CAT 906M loader - #194396-01-01	Dyno Nobel	1	70
Milne Port	EBC ACCESSORIES - Heater (Flagro) #2T9T2HB23HS149172	EBC	3	2.4

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Milne Port	SD-40 Maintenance Locomotive/Switcher/Car Mover	G&W - ZR001	1	400
Milne Port	65T Crane	GORF	1	110
Milne Port	Tower Light	GORF	12	9.6
Milne Port	JCB 260 Bobcat	GORF	1	1
Milne Port	Welding Machine	GORF	1	0.5
Milne Port	Frost Fighter 400,000 BTU	GORF	1	0.8
Mine Site	Light Vehicles (F350 or equiv.)	GORF	2	2
Mine Site	60' Man Lift	GORF	1	16
Mine Site	Skytrack w Forks	GORF	1	2
Mine Site	Boom Truck	GORF	1	4
Mine Site	Scissor Lift	GORF	1	16
Mine Site	80' Man Lift	GORF	1	16
Milne Port	500 kW Diesel Generator	GORF	4	4
Mine Site	10 Passenger Van	GORF	1	1
Milne Port	Cat Skid Steer 259D	Horizon	1	15
Milne Port	Light Vehicles (F350 or equiv.)	Horizon	2	2
Milne Port	5600i cement mixer	Nahanni	1	30
Milne Port	NNL Unit# TBD 130T Crane	NNL/Moreau	1	90
Milne Port	20' Container - Air Compressor	NNL/Moreau	1	18
Milne Port	20' Container - Air Compressor	NNL/Moreau	1	18
Milne Port	20' Container - Scissor Lift & Tools	NNL/Moreau	1	16
Milne Port	Light Vehicles (F350 or equiv.)	NNL/Moreau	2	2
Milne Port	NNL Unit #1468 Skytrack 8000lbs	NNL/Moreau	1	8
Mine Site	14M Grader	Nuna	2	60
Mine Site	374F Excavator	Nuna	2	80
Milne Port	745C truck	Nuna	22	2750
Milne Port	950M Loader	Nuna	2	140
Milne Port	966M Loader	Nuna	2	140
Milne Port	980M Loader	Nuna	3	210
Milne Port	988K Loader	Nuna	2	140
Milne Port	Cat 980K Loader	Nuna	2	140
Milne Port	D8T dozer	Nuna	7	85
Milne Port	Glacier - Sandvik 1500i Drill	Nuna	6	438

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Milne Port	CAT 259D Track Loader + Extra Bucket	Nuna	1	70
Milne Port	CAT 289D Track Loader + Extra Bucket	Nuna	2	140
Milne Port	Light Vehicles (F350 or equiv.)	Nuna	14	14
Milne Port	Glacier - Skidsteer	Nuna	4	60
Milne Port	Glacier - Skidsteer Trailer	Nuna	1	15
Mine/Port	Glacier - Skidsteer Trailer	Nuna	1	15
Milne Port	Generator 120KW -	Nuna	1	2
Milne Port	336E Excavator	Nuna	2	80
Mine Site	349F Excavator	Nuna	4	80
Milne Port	Cat 930 Wheel Loader with Forks #FRF00689	Nuna	2	140
Milne Port	Cat CS563 Packer #1508	Nuna	2	30
Milne Port	CS56B	Nuna	1	18
Milne Port	CS78B	Nuna	2	40
Milne Port	D6T dozer	Nuna	2	75
Milne Port	Fuel/Lube Truck	Nuna	1	12
Milne Port	Glacier - Mechanic Truck #TR210	Nuna	1	6
Milne Port	NUNA - F550 Flat Deck/Mechanic Truck	Nuna	11	88
Milne Port	NUNA - Hamm 3205 Packer	Nuna	1	32
Milne Port	NUNA - Raw Water Truck Unit #196	Nuna	1	14
Milne Port	NUNA - RO/RO Tank for Truck	Nuna	2	18
Milne Port	NUNA - Welding Truck #1994	Nuna	2	8
Milne Port	745C truck	SANA	3	375
Milne Port	775G Haul Truck	SANA	2	250
Milne Port	988K Loader	SANA	1	70
Milne Port	Drill Sandvic DX-800R - Unit #19-0901	SANA	1	120
Milne Port	Drill Sandvik DI-550 - Unit	SANA	2	280
Milne Port	Grader CAT 14M - Unit #512	SANA	1	60
Milne Port	Grizzly Unit - MASABA Feeder - Portable C120 Jaw Plant	SANA	1	95
Milne Port	KOMATSU HD-605-7 HAUL TRUCK	SANA	8	1000
Milne Port	Wheel loader CAT 908 - #19-0204	SANA	2	140
Milne Port	Wheel loader Komatsu WA500 - Unit #18-0204	SANA	1	70

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Milne Port	Wheel loader Komatsu WA600	SANA	3	210
Milne Port	Wheels Loader CAT 982	SANA	1	70
Milne Port	Tower Light	SANA	12	9.6
Milne Port	Frost Fighters	SANA	10	8
Milne Port	Skytrack	SANA	1	1
Milne Port	Light Vehicles (F350 or equiv.)	SANA	20	20
Milne Port	Frosfighter 1000000BTU	SANA	6	4.8
Milne Port	Generators 500 kW	SANA	6	120
Milne Port	Screener #19-0114	SANA	1	45
Milne Port	1050 Dozer	SANA	1	70
Milne Port	Bus	SANA	2	20
Milne Port	352 Excavator	SANA	3	80
Milne Port	Mack Fuel truck - Unit #11-0113	SANA	1	23
Milne Port	Mechanic Truck - Unit	SANA	3	24
Milne Port	Tridem Tractor #19-0127	SANA	1	13
Milne Port	DX800	Sandvik	1	77
Milne Port	374F excavator	Toromont	1	80
Milne Port	980M loader	Toromont	2	140
Milne Port	D8T Dozer	Toromont	4	70
Milne Port	Mobile Fleet- 745C Rock Truck 745C -	Toromont	5	625
Milne Port	Mobile Fleet- 950M Loader	Toromont	2	140
Milne Port	745C Haul truck	Toromont	3	375
Milne Port	950 Loader	Toromont	2	140
Milne Port	Tower Light	Toromont	2	1.6
Milne Port	Light Vehicles (F350 or equiv.)	Toromont	3	3
Milne Port	289 Skid Steer	Toromont	1	15
Milne Port	Service Truck	Toromont	1	4
Milne Port	349F Excavator	Toromont	2	80
Milne Port	988 Loader	Tretan	1	70
Milne Port	Light Vehicles (F350 or equiv.)	Tretan	5	5
Milne Port	Frost fighter flagro	Tretan	2	1.6
Milne Port	500 kW Diesel Generator	Tretan	2	40
Milne Port	Flat deck Trailer	Tretan	10	20

Property Section	Material Item	Owner	Quantity	Revenue Tonne
<i>e.g. Milne Port or Mine Site</i>	<i>Description of the material*</i>		<i>Quantity of the material to be shipped to and stored on the Property (including unit of measurement)</i>	<i>Estimated amount of revenue tonnes (mt) assigned to the shipping of material</i>
Milne Port	40,000L Fuel Tank Trailer	Tretan	7	161
Milne Port	Kenworth Tractor	Tretan	7	301
Milne Port	Western Star Tractor	Tretan	5	255
Milne Port	WA250 Loader	Tretan	1	70
Milne Port	Kone Reach Stacker	Tretan	1	80
Milne Port	Service Truck	Tretan	1	6

In addition to the above noted equipment to be brought to the Project in 2020, there are materials and equipment that will arrive on the 2020 sealift in support of the Phase 2 amendment. These materials consist of large modules, and were previously referred to in the 2018 Work Plan and 2018 Work Plan Addendum as the Expansion Project Equipment and Materials (the 'Modules'). In addition to the Crushing, Screening, Car Dumper, Bulk Material Handling (BMH) Conveyors, and Rail Materials, a Shiploader Module was added to the 2019 Work Plan and ASR. A large quantity of these materials arrived on the 2019 sealift, however there remains equipment and materials that will be mobilized in 2020. Reclamation security remains in place for this equipment, however it is included here for clarity on the scope of the 2020 sealift. While these materials will be constructed following approval of the Phase 2 expansion, they are being mobilized to Site with the understanding that they would need to be backhauled in the event Phase 2 is not approved. To assist with the calculation of reclamation securities, the detailed breakdown of the Modules is provided in Table 8-3.

Table 8-3: Expansion Project Equipment and Materials

Module Package	Description	Total Volume (m3)
Shiploader	Shiploader	77,938
	Jetty Travel Gear for Shiploader	2,268
	Landside Travelgear for shiploader (Pivot Point)	1,174
	Lower Part Pivot point for shiploader (to be casted in grouting)	20
Subtotal Shiploader		81,400
BMH Conveyors (Transfer Conveyor)	Corrugated wall panels for tower base	0
BMH Conveyors (Fines Conveyor)	Fines collection conveyor stick built section and Head Chute	0
BMH Conveyors (Stockpile #2 Conveyor)	Drive Station	9,023
	Chute - 4211-CV-001 Head Yard Stockpile #2 conveyor	67
	Chute - 4211-CV-001 Head Yard Stockpile #2 conveyor	183
	Chute - 4211-CV-001 Head Yard Stockpile #2 conveyor	23

Module Package	Description	Total Volume (m3)
	Chute - 4211-CV-001 Head Yard Stockpile #2 conveyor bypass chute	23
	Stockpile Conveyor Chute Platform - shipped in container	0
BMH Conveyors (Shiploader Feed Conveyor)	Drive Station	3,844
Subtotal BMH Conveyors		13,163
Rail Materials	Pandrol Victor Tie Plates (preplated on ties)	764
	Screw Spikes Bags (30/bag)	1,447
	E-Clip Fastener Bags (25kg - 40 bags/pallet)	126
	11" Tie Plates Pallet (300/pallet)	2
	Rail Ties Bundle of 30 ties	11,213
	weld kits (25/ pallet)	171
	Keg track spikes (48/pallet)	3
	joint bar (100/pallet) 136#	3
	Keg bolts & washers (48/pallet)	3
	turnout rail 136# AHH RE	17
	joint bar 115#	10
	HW turnout package ties	150
	TO frog	8
	Sliding Derail	1
	Bumping Post	12
	136# RE RAIL guardrail	3
	Crossing Panel	19
	Timber Screws (1 Pallet)	142
	Rails 25 per bundle	4,059
	115# RE Rail	17
Subtotal Rail		18,172

Additional supplies to support construction and operations through 2020 and 2021 will arrive on the 2012 sea lift include:

- Delivery of ammonium nitrate (AN), up to 20,125 m³ (16,100 tonnes) to be stored on-site in 2020;
- Delivery of pre-packaged explosives, up to 176,000 kg to be stored on-site in 2020;
- Delivery of maintenance parts; and
- Delivery of consumables (lubricants, grease, detergents, boosters, EZ Dets, dry goods, food, household supplies, etc.).

SECTION 9.0 - UPDATES TO ITEMS CONTAINED IN THE SCHEDULES OF THE LEASE

9.1 UPDATES TO THE EMERGENCY RESPONSE PLAN

In accordance with Clause 5.1 item H of the existing Commercial Lease Q13C031, the applicable Emergency Response Plan BAF-PH1-830-P16-0007 and Spill Contingency Plan BAF-PH1-830-P16-0036 have been provided in Appendices of this Work Plan. Please refer to Section 11 for location and details.

9.2 UPDATES TO ENVIRONMENTAL MANAGEMENT AND MONITORING PLANS

All updated Environmental Management and Monitoring Plans were submitted in March 2019 with the Annual Reports, with the exception of the Milne Port Oil Pollution Emergency Plan (OPEP), Spill Contingency Plan, and Emergency Response Plan which were updated in September 2018 in support of the approved 6Mtpa production increase. Note that draft Management Plans submitted through the Project Certificate amendment and Water Licence amendment process for Phase 2 have not been included herein as they remain in draft form and will only be included as final following approval of Phase 2. An extensive list of the current plans for the project is presented in Table 9-1 below.

Table 9-1: Environmental Monitoring and Management Plans

Document Number	Plan Name	Version
BAF-PH1-830-P16-0002	Air Quality and Noise Abatement Management Plan	March 2016
BAF-PH1-830-P16-0006	Cultural Heritage Resource Protection Plan	March 2016
SD-STD-002	Hazard Identification and Risk Assessment Procedure	December 2015
N/A	EHS Framework Standard	March 2014
H337697-0000-01-126-0002	Health and Safety Management Plan	January 2012
SD-SEMP-003	Human Resources Management Plan	December 2010
BAF-PH1-830-P16-0027	Terrestrial Environmental Management and Monitoring Plan	March 2016
BAF-PH1-830-P16-0025	Stakeholder Engagement Plan	March 2016
BAF-PH1-830-P16-0023	Roads Management Plan	March 2019
BAF-PH1-830-P16-0024	Shipping and Marine Wildlife Management Plan	March 2016
N/A	Blasting Management Plan	April 2013
BAF-PH1-830-P16-0004	Borrow Pits and Quarry Management Plan	March 2014
N/A	Borrow Source Management Plan ¹	October 2013
BAF-PH1-830-P16-0030	Borrow Source Management Plan - Kilometer 2	October 2014
BAF-PH1-830-P16-0032	Borrow Source Management Plan - Kilometer 97	October 2014
BAF-PH1-830-P16-0035	Borrow Source Management Plan - Kilometer 104	March 2014
H349000-4200-07-245-0001	Quarry Management Plan D1Q1	October 2013
H349000-4200-07-245-0002	Quarry Management Plan D1Q2	October 2013
BAF-PH1-830-P16-0017	Quarry Management Plan Q1	July 2017
H349000-3000-07-245-0002	Quarry Management Plan Q11	October 2013
H349000-3000-07-245-0003	Quarry Management Plan Q19	October 2013

Document Number	Plan Name	Version
H349000-3000-07-245-0001	Quarry Management Plan Q7	October 2013
BAF-PH1-830-P16-0040	Quarry Management Plan QMR2	July 2017
BAF-PH1-840-P16-0002	Emergency Response Plan	September 2018
BAF-PH1-830-P16-0036	Spill Contingency Plan	September 2018
BAF-PH1-830-P16-0008	Environmental Protection Plan	August 2016
BAF-PH1-830-P16-0010	Fresh Water Supply, Sewage and Wastewater Management Plan	March 2019
BAF-PH1-830-P16-0011	Hazardous Materials and Hazardous Waste Management Plan	March 2017
BAF-PH1-830-P16-0012	Interim Closure and Reclamation Plan	October 2018
BAF-PH1-830-P16-0026	Surface Water and Aquatic Ecosystems Management Plan	March 2019
BAF-PH1-830-P16-0001	Surface Water Sampling Program - Quality Assurance and Quality Control Plan	March 2017
BAF-PH1-830-P16-0039	Aquatic Effects Monitoring Plan	October 2015
BAF-PH1-830-P16-0028	Waste Management Plan	September 2018
BAF-PH1-830-P16-0029	Phase 1 Waste Rock Management Plan	November 2017
N/A	Interim Waste Rock Management Plan	March 2019
BAF-PH1-830-P16-0031	Life of Mine Waste Rock Management Plan	April 2014
N/A	Explosives Management Plan ²	August 2013
BAF-PH1-830-P16-0013	Milne Port Oil Pollution Emergency Plan (OPEP)	September 2018
BAF-PH1-830-P16-0041	Polar Bear Safety Plan	March 2016
BAF-PH1-830-P16-0037	Exploration Spill Contingency Plan	June 2014
BAF-PH1-830-P16-0038	Exploration Closure and Reclamation Plan	July 2014
BAF-PH1-830-P16-0042	Spill at Sea Response Plan	August 2015

NOTES:

¹ Discontinued and incorporated into the March 2014 Borrow Pits and Quarry Management Plan.

² The Explosives Management Plan is a contractor document.

9.3 PROPOSED UPDATES TO THE INTERIM CLOSURE AND RECLAMATION PLAN

The Interim Closure and Reclamation Plan (ICRP) was updated in 2018 (Revision 5, 30 October 2018) and approved by QIA, and has been provided as an appendix to this Work Plan. Baffinland has continued to engage QIA on closure planning, including an update to the ICRP to integrate the Phase 2 proposal into closure planning that is currently under review by QIA, but is not included here and is not to be relied upon until approved by QIA and the approval of the Phase 2 amendment. The ICRP is intended to be an iterative document that will evolve over the life of the mine, and it is recognized that QIA as the land owner will provide valuable input and approval of future versions of the ICRP.

The provision of additional securities for the 2020 Work Plan is allocated as summarized in Table 9-2 below. Further detail can be found in Appendix B.

Table 9-2: Mary River Project Total Closure and Reclamation Security Summary¹ – 2020 Work Plan

	A	B	C	D	E	F	G
	Authorization	Liability	Global Estimate from 2019 Estimate (\$)	2020 Estimate, Including 2019 Reconciliation (\$)	Total 'Global' Estimated Security for 2020 (\$)	Total Posted as of July 2019 (\$)	Marginal Adjustment to be Posted (\$)
					C + D		E - F
1	Type A 2AM- MRY1325	IOL ²	96,438,000	18,055,000	114,493,000	104,687,658	9,805,342
2		Crown	1,802,000	1,477,000	3,279,000	1,448,801	1,830,199
3		Water	1,387,000	-11,000	1,387,000	-	-
4		Land	96,852,878	19,543,000	116,395,878	-	-
5	<i>Subtotal Type A</i>		98,240,000	19,532,000	117,772,000	106,136,459	11,635,541
6	Type B Exploration 2BE- MRY1421 ³	IOL	165,000	-	165,000	-	165,000
7		Crown	1,082,000	-	1,082,000	1,250,000	-168,000
8		Water	18,000	-	18,000	-	-
9		Land	1,229,000	-	1,229,000	-	-
10	<i>Subtotal Type B Exploration</i>		1,247,000	-	1,247,000	1,250,000	-3,000
11	DFO Security Associated with Ore Dock	IOL ²	-	-	-	-	-
12		Crown	563,000	-	563,000	563,000	-
13		Water	563,000	-	563,000	563,000	-
14		Land	-	-	-	-	-
15	<i>Subtotal DFO</i>		563,000	-	563,000	563,000	-
16	AANDC Land Lease 47H/16-1- 2 ⁴	IOL ²	-	-	-	-	-
17		Crown	4,975,000	-	4,975,000	4,975,000	-
18		Water	-	-	-	-	-
19		Land	4,975,000	-	4,975,000	4,975,000	-
20	<i>Subtotal AANDC Land Lease</i>		4,975,000	-	4,975,000	4,975,000	-
21	GRAND TOTAL		76,816,000		105,025,000	81,916,326	

NOTES:

1) Totals rounded to nearest '000 in CAD

2) Security relating to IOL held by Qikiqtani Inuit Association (QIA) under Commercial Lease No. Q13C301

3) As per Mary River Exploration Project Closure and Reclamation Plan (BAF-PH1-830-P16-0038, Rev 1)

4) Posting process for security relating to AANDC Land Lease 47H/16-1-2 phased into a 2-step approach. Phase 1 to be posted November 2016.

5) As per Closure and Reclamation Strategy and Financial Security Estimate for Nunavut Lease #47H/16-1-2 (H349001-2000-07-126-0001, Rev.0)

SECTION 10.0 - REQUESTED AMENDMENTS TO THE PROVISIONS OF THE LEASE

Tote Road Adjustment Notices (TRANS) and Options Exercise Notices (OENs) will be submitted as per Table 3-1, throughout 2020. It is noted that per the Commercial Lease, review of OENs and TRANS outside of the Work Plan will require an associated fee for review. An OEN will be required to adjust the boundaries of the Commercial Lease associated with the Phase 2 proposal, discussions with QIA on this subject are on-going.

SECTION 11.0 - ADDITIONAL REPORTS, INFORMATION OR DATA

Additional reports, information or data required to support the 2020 Work Plan are summarized in Table 11-1 below.

Table 11-1: Additional Reports, Information or Data

Title	Organization	Date	Annex
<i>Identify the title of the additional report, information or data to be included with the Annual Work Plan.</i>	<i>Disclose the name of the organization that produced the additional report, information or data.</i>	<i>Include the publish date or reference year to the additional report, information or data.</i>	<i>Identify the Annex letter/number corresponding to the additional report, information or data.</i>
Work Plan Figures - Milne Port - Mine Site - Tote Road	Baffinland	1 November 2019	Appendix A
2020 Marginal Closure and Reclamation Financial Security Estimate	Baffinland	1 November 2019	Appendix B
Interim Closure and Reclamation Plan	Baffinland	BAF-PH1-830-P16-0012	Appendix C
Emergency Response Plan	Baffinland	BAF-PH1-830-P16-0007	Appendix D
Spill Contingency Plan	Baffinland	BAF-PH1-830-P16-0036	Appendix E

Appendix A:

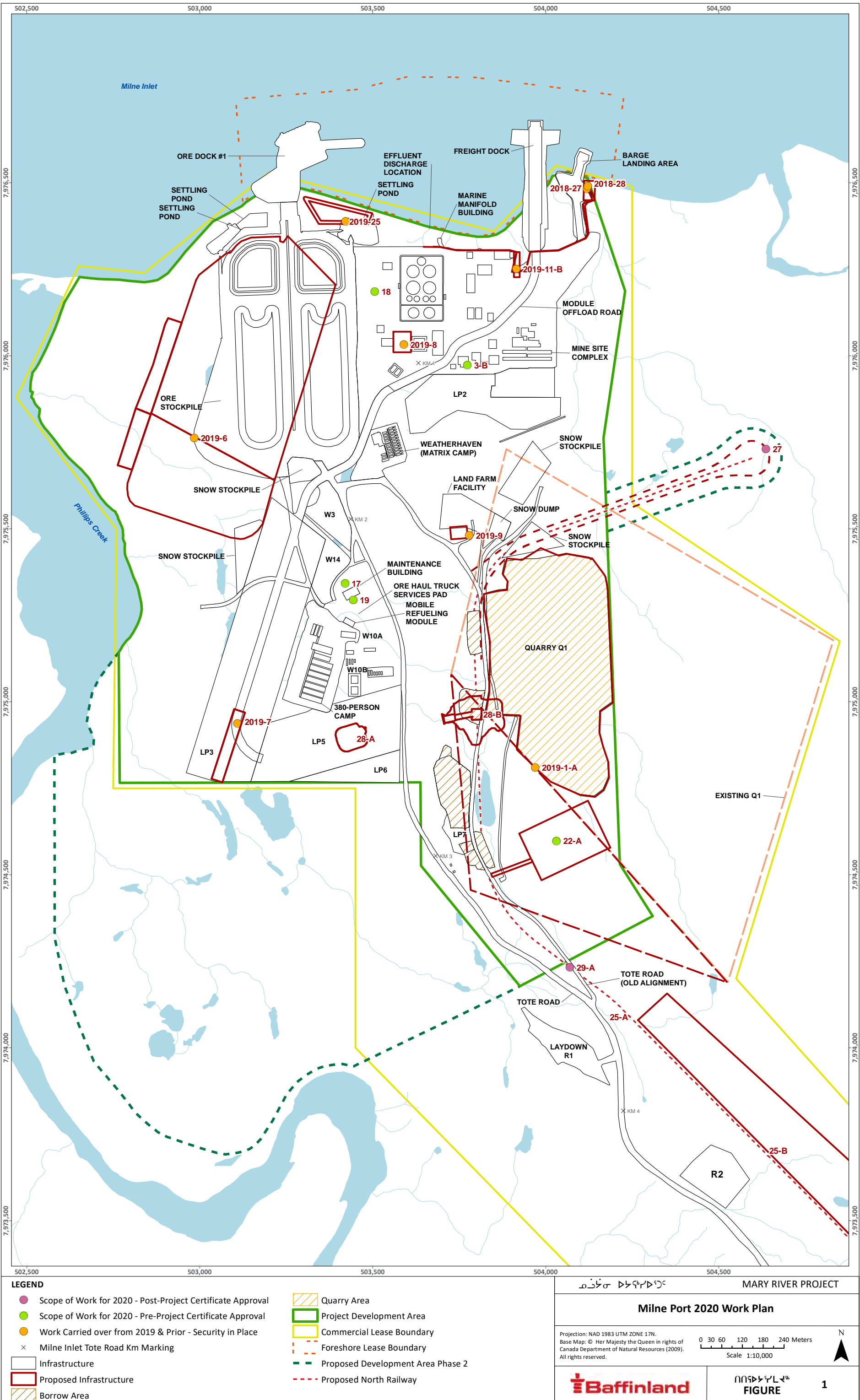
2020 Work Plan Site Layouts

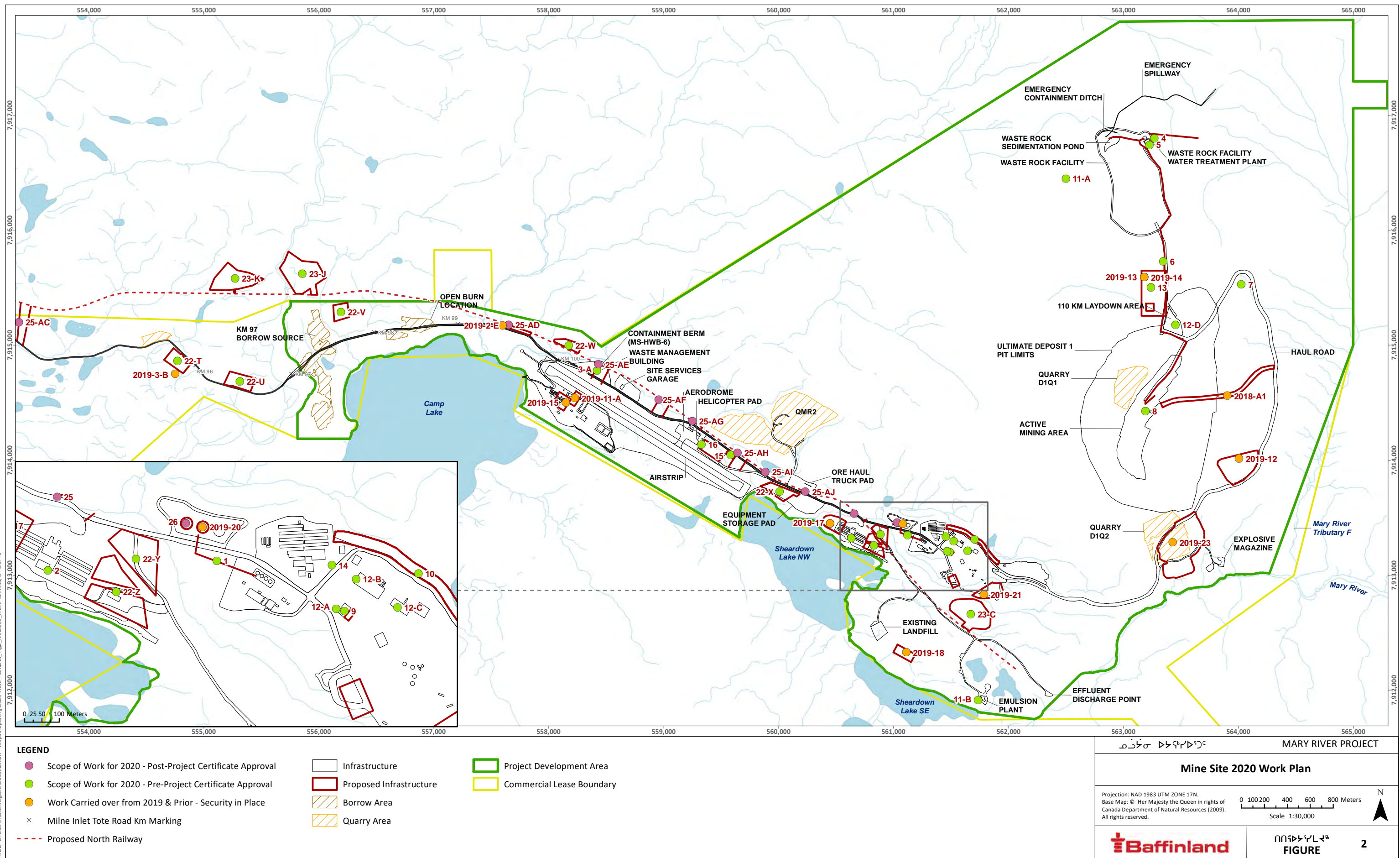
2020 Work Plan – Milne Port Site Layout

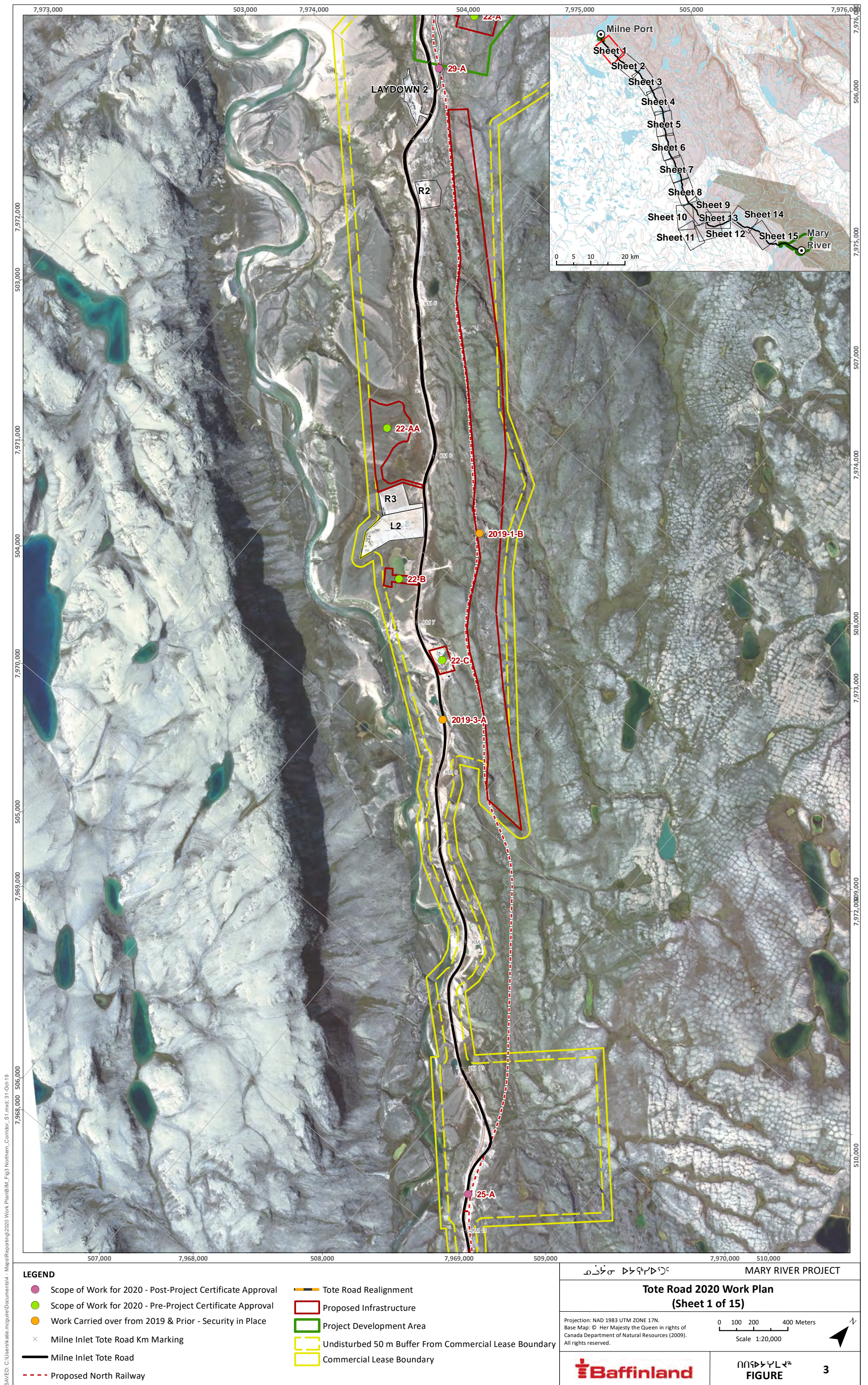
2020 Work Plan – Mine Site Layout

2020 Work Plan – Tote Road

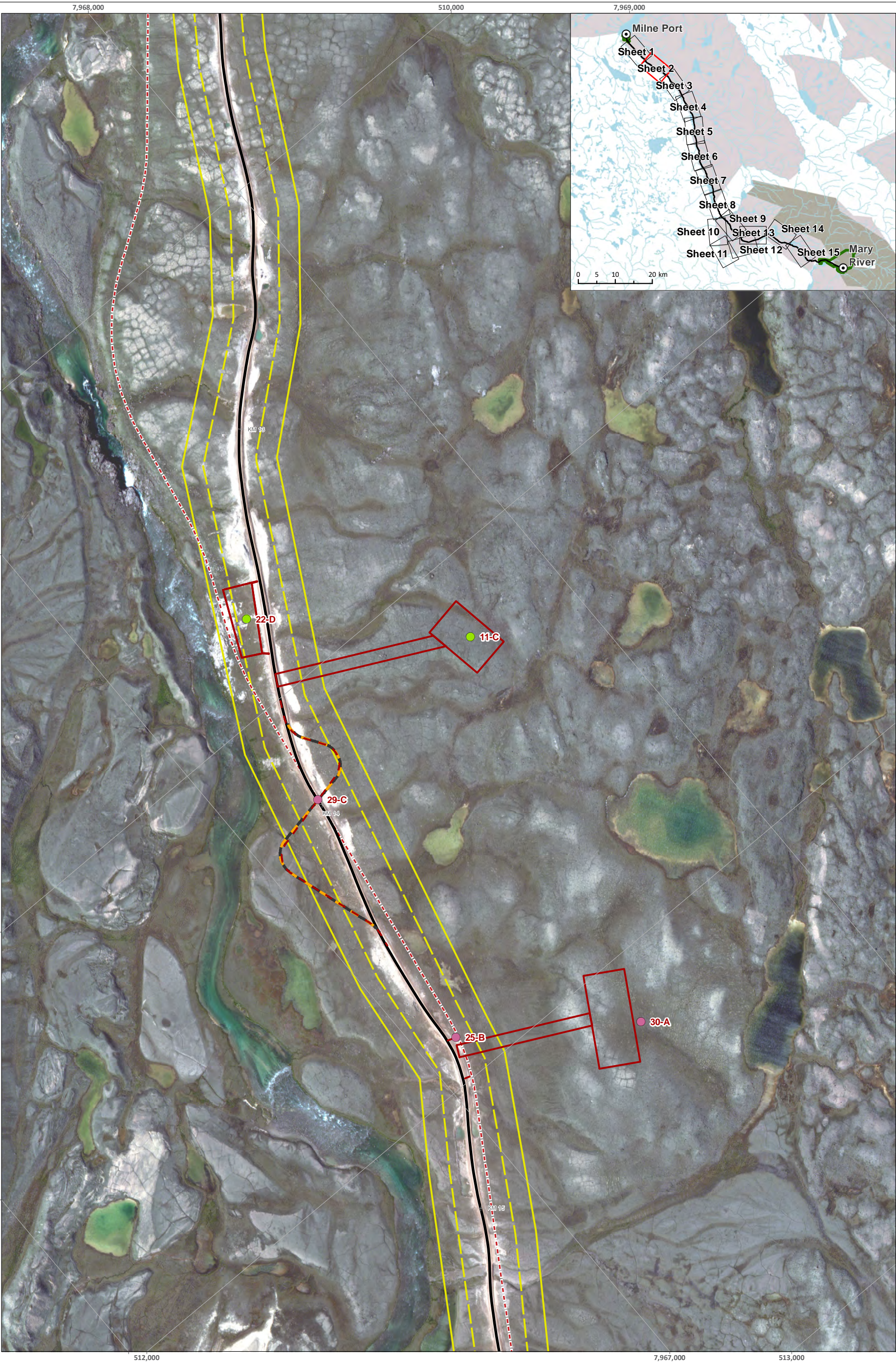
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LEGEND

- Scope of Work for 2020 - Post-Project Certificate Approval

Scope of Work for 2020 - Pre-Project Certificate Approval

Work Carried over from 2019 & Prior - Security in Place

×

 Milne Inlet Tote Road Km Marking

Milne Inlet Tote Road

Proposed North Railway
- Tote Road Realignment

Proposed Infrastructure

Project Development Area

Undisturbed 50 m Buffer From Commercial Lease Boundary

Commercial Lease Boundary

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MARY RIVER PROJECT

Tote Road 2020 Work Plan
(Sheet 2 of 15)

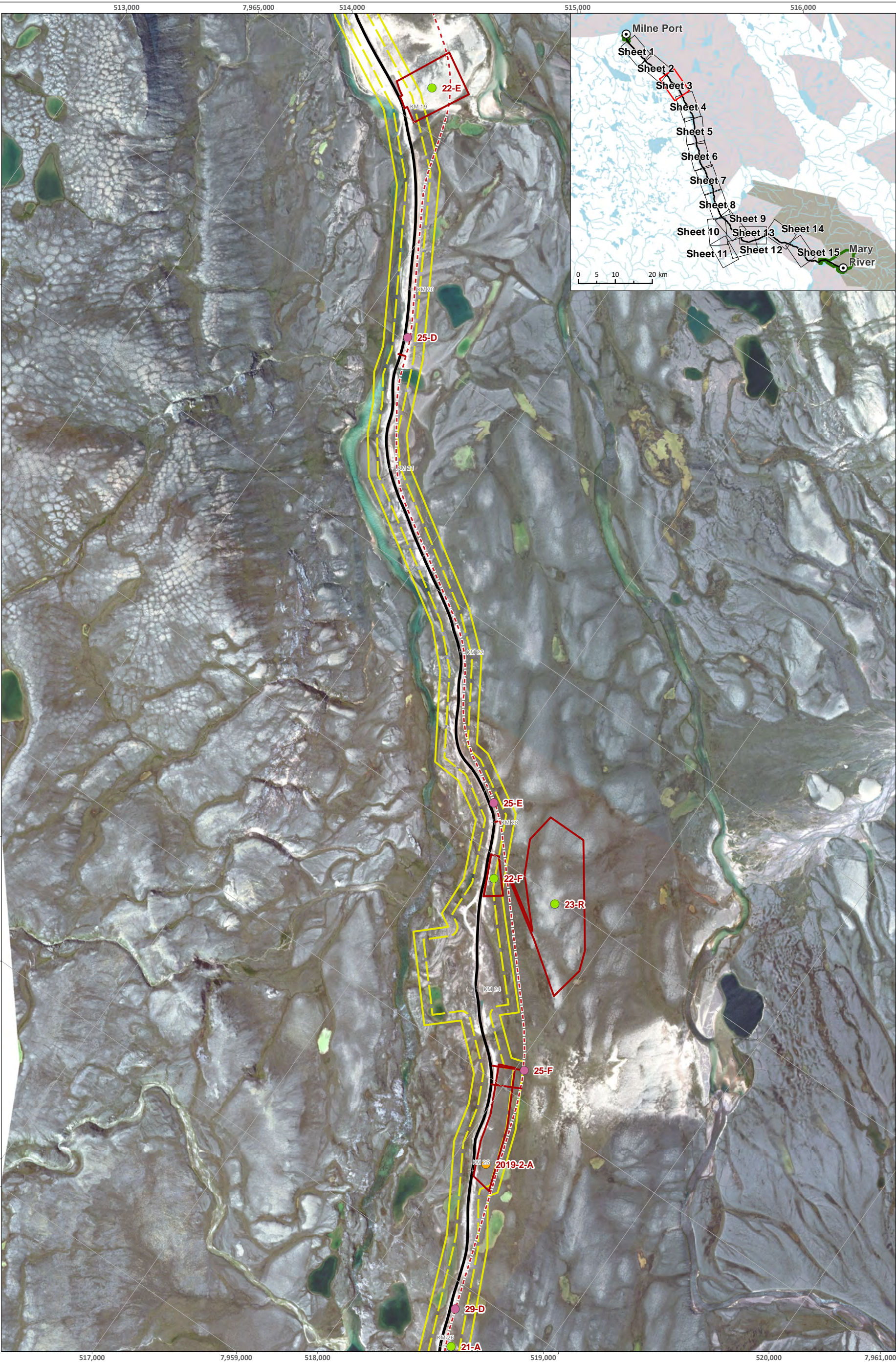
Projection: NAD 1983 UTM ZONE 17N.
Base Map: © Her Majesty the Queen in rights of
Canada Department of Natural Resources (2009).
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FIGURE

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LEGEND

- Scope of Work for 2020 - Post-Project Certificate Approval
- Scope of Work for 2020 - Pre-Project Certificate Approval
- Work Carried over from 2019 & Prior - Security in Place
- Milne Inlet Tote Road Km Marking
- Milne Inlet Tote Road
- Proposed North Railway
- Tote Road Realignment
- Proposed Infrastructure
- Project Development Area
- Undisturbed 50 m Buffer From Commercial Lease Boundary
- Commercial Lease Boundary

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MARY RIVER PROJECT

Tote Road 2020 Work Plan
(Sheet 3 of 15)

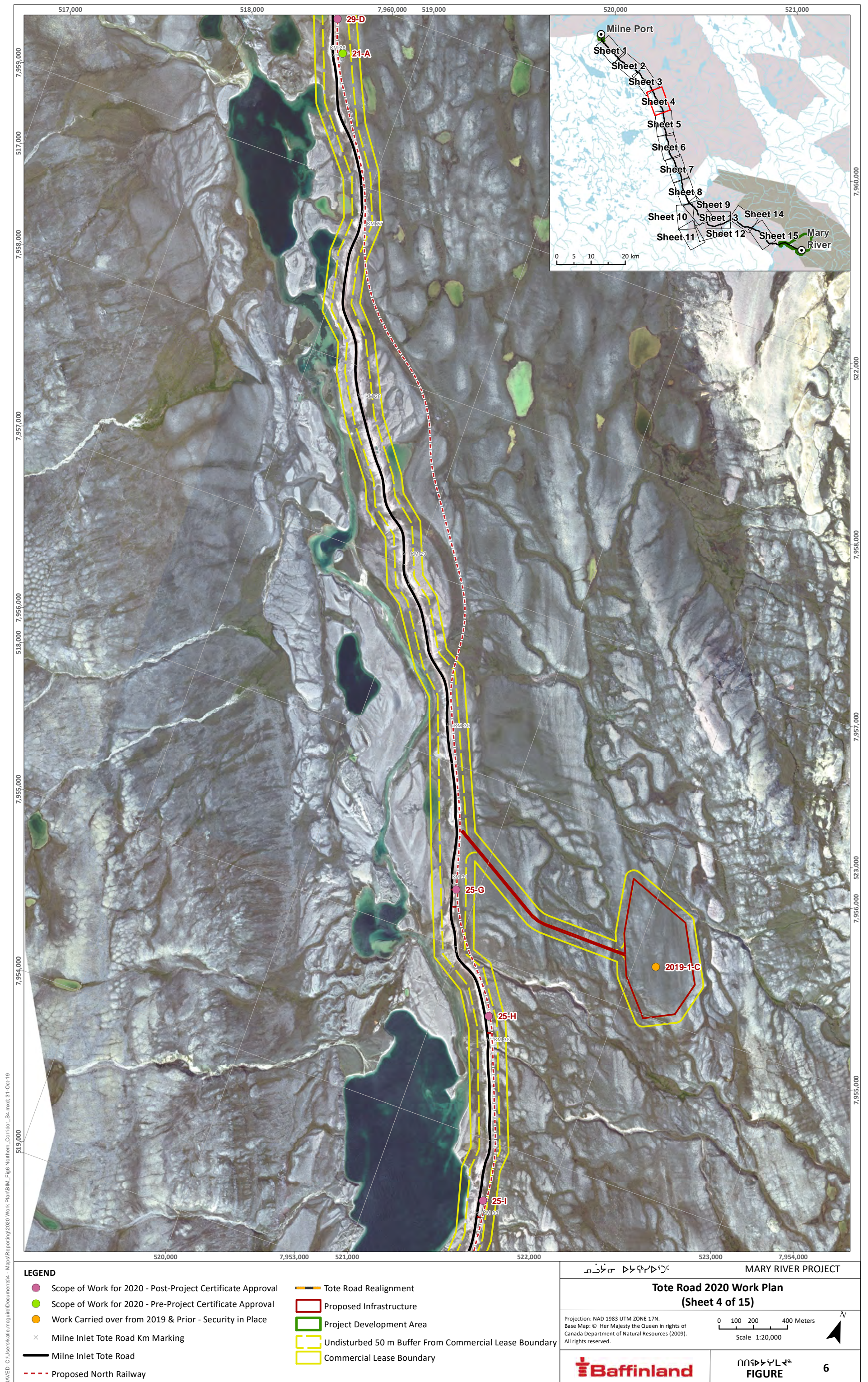
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FIGURE

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