No fuel is stored on the ice. Any fuel required for the on-ice drilling will be transported to the site in large plastic containers. Drip pans are used under the tanks to prevent fuel contamination.

5.8 STEENSBY INLET RAIL ALIGNMENT AND HYDRO-ELECTRIC SITE

Description

- No permanent structures or buildings
- No camps. The previously discussed camps at Steensby Inlet and Mary River are used.
- Fuel is stored at either the Milne Inlet or Steensby Inlet Camps within the storage facilities and flown to the drill sites as required
- Geotechnical drilling
- Water taking for drilling
- Drill water discharge (using mitigation measures previously discussed)
- The location of the site is shown on Figure 1.2

Surface Water Direction and Quantity

The catchment areas for the Steensby Inlet Transportation Corridor and hydro-electric site are shown on Figure 5.5. The surface water along the corridor is ultimately directed to Cockburn River, Cockburn Lake, Ravn River and Angajurjualuk Lake. Specific surface water runoff quantities were not calculated for the transportation corridor due to the large catchment area and the minimal quantity of water required for the drilling.

Mitigation Procedures

Sediment and erosion control measures may be required and are installed as per the previous section General Mitigation Measures. The site is regularly monitored as discussed in the Monitoring section of this report.

5.9 BULK SAMPLE OPEN PIT OPERATIONS

Description

- Approximately 250,000 t bulk sample of iron ore from Deposit No. 1 will be removed from two pits (hematite pit and magnetite pit) within the Mary Lake catchment area
- Approximately 169,000 t near surface ore removed to stockpile located at top of Deposit No. 1
- Ore will be extracted by blasting with explosives and excavating at 5 m intervals, pits will be approximately 15 m in depth
- Ore will be transported from the bulk sample pits to the ore crushing area by haul trucks
- Ore sample will be crushed in the crushing area using a portable crusher to produce a lump ore product and a fine ore product
- Lump and fine ore product will stored in separate piles
- No camps
- No fuel storage
- Acid rock drainage (ARD) and metal leaching (ML) tests have been conducted on the fresh ore, with results indicating that, due to the physical environment and the geochemistry of the ore, ARD and ML are very unlikely to occur (Knight Piésold letter NB07-00481)

Surface Water Direction and Quantity

The catchment areas for the bulk sample open pit operations are shown on Figures 5.1 and 5.2. Ultimately the surface water at the site is directed towards Camp, Sheardown and Mary Lakes. The estimated surface water runoff quantities for each catchment area are shown on Table 5.1.

Mitigation Procedures

Sediment and erosion control measures may be required and will be installed as per the previous section General Mitigation Measures. The site will be regularly monitored as discussed in the Monitoring section of this report. If evidence of ARD and ML is noted, up gradient surface run-off will be routed around the pits and stockpiles, and neutralizing material will be placed in the pits and mixed with the stockpiles to effectively neutralize any potential acid. Nearby dolostone, limestone or local acid-buffering overburden material would be used as the neutralizing agent, if needed.

5.10 WEATHERED ORE / WASTE STORAGE PILES

Description

- Two types of waste rock will be generated during the bulk sample program: a small volume of non-ore bearing waste rock and weathered iron ore
- Weathered ore will be stripped and stockpiled at a location shown on Figure 5.2. Waste rock will likely remain in the weathered ore stockpile.
- Acid rock drainage (ARD) and metal leaching (ML) tests have been conducted on the fresh ore, with results indicating that, due to the physical environment and the geochemistry of the ore, ARD and ML are very unlikely to occur (Knight Piésold letter NB07-00481)

Surface Water Direction and Quantity

The catchment areas for the bulk sample open pit operations are shown on Figure 5.2. Ultimately the surface water in the area is directed towards Camp, Sheardown and Mary Lakes. The estimated surface water runoff quantities for each catchment area are shown on Table 5.1.

Mitigation Procedures

Sediment and erosion control measures may be required and will be installed as per the previous section General Mitigation Measures. The site will be regularly monitored as discussed in the Monitoring section of this report. If evidence of ARD and ML is noted, up gradient surface runoff will be routed around the pits and stockpiles, and neutralizing material will be placed in the pits and mixed with the stockpiles to effectively neutralize any potential acid. Nearby dolostone, limestone or local acid-buffering overburden material would be used as the neutralizing agent, if needed.

5.11 CRUSHING OPERATIONS AT MARY RIVER

Description

- Temporary crusher feed stockpiles (hematite and magnetite) will be located north-east of Sheardown Lake at Mary River
- Temporary stockpiles of lump ore and fines (hematite and magnetite) will be located adjacent to the crusher

- Trucks will enter and exit the crushing area using roads from Deposit No. 1 and by the bulk sampling road
- ARD and ML tests have been conducted on the fresh ore, with results indicating that, due to the physical environment and the geochemistry of the ore, ARD and ML are very unlikely to occur
- Locations are shown on Figure 5.2

Surface Water Direction and Quantity

The catchment areas for the stockpiles and crusher operations in the vicinity of the Mary River Camp are shown on Figure 5.2. Surface water in this area is directed towards Sheardown and Lake. The estimated surface water runoff quantities for each catchment area are shown on Table 5.1.

Mitigation Procedures

Sediment and erosion control measures may be required and will be installed as per the previous section General Mitigation Measures. The site will be regularly monitored as discussed in the Monitoring section of this report.

5.12 TEMPORARY ORE STORAGE AT MILNE INLET

Description

- Temporary stockpiles of lump ore and fines will be located at Milne Inlet adjacent to the beach loading area
- Ore will be transported to Milne Inlet from the Mary River Area using the upgraded tote road (Sub-section 5.13)
- ARD and ML tests have been conducted on the fresh ore, with results indicating that, due to the physical environment and the geochemistry of the ore, ARD and ML are very unlikely to occur
- Location of the temporary stockpiles is shown on Figure 5.3

Surface Water Direction and Quantity

The catchment areas for the stockpiles at Milne Inlet are shown on Figure 5.3. Surface water in this area is directed towards Milne Inlet. The estimated surface water runoff quantities for each catchment area are shown on Table 5.2.

Mitigation Procedures

Sediment and erosion control measures may be required and will be installed as per the previous section General Mitigation Measures. The site will be regularly monitored as discussed in the Monitoring section of this report. The stockpiles will be located a minimum of 30 m from the normal high water mark of Milne Inlet and other water bodies.

5.13 BULK FUEL STORAGE AREAS

Description

- Bulk and barrel fuel is stored within lined containment areas in the following locations:
  - Milne Inlet Camp (bulk and barrel storage)
  - Midway Camp (small barrel cache)

  - Mary River Camp (bulk and barrel storage)
  - Steensby Inlet Camp (barrel cache)
- Bulk fuel is stored in fuel bladders
- Each bulk fuel storage facility includes dispensers with electric pumps and shut-off valves, and fuelling procedures require full-time attendance
- Fuel stations will consist of a lined pad backfilled with soil. Any fuel spills will be contained within this pad, which can be excavated, analyzed, and treated as required at the end of the bulk sampling program.

Surface Water Direction and Quantity

The catchment areas for the Milne Inlet area are shown on Figure 5.3. Surface water at the site is directed to Milne Inlet. The estimated surface water runoff quantities for each catchment area are shown on Table 5.2.

The catchment areas for the Mary River Camp area are shown on Figure 5.1. Surface water in the area is directed towards Camp, Sheardown and Mary Lakes. The estimated surface water runoff quantities for each catchment area are shown on Table 5.1.

The catchment areas for the Steensby Inlet Camp area are shown on Figure 5.4. Surface water in the area reports to Steensby Inlet. The estimated surface water runoff quantities are shown on Table 5.3.

Mitigation Procedures

Secondary containment of the fuel will be provided by berms and liners in all handling and storage areas. There will be electric pumps and shut-off valves, and full-time attendance will be required during fuelling. Fuel storage areas will be regularly monitored for visual indication of hydrocarbon staining and/or sheen. Drip pans will be used where required. Where spills occur, they will be contained within the berms and liners, and the impacted area will be excavated, analyzed, and treated as required at the end of the bulk sampling program. Any accumulated water from within the bulk fuel storage areas is tested in accordance with the water licence prior to release to the environment.

5.14 ALL WEATHER ROAD

Description

- Historic dirt road constructed in the mid 1960's (tote road / bulk sampling road)
- The existing 105 km tote road running between Milne Inlet and the Mary River camp is being upgraded to support transport of the bulk sample from Deposit No. 1
- Select water crossings along the road are being upgraded through the installation of culverts and modified sea containers as per Department of Fisheries and Oceans (DFO) approval
- No permanent structures or buildings
- A temporary roadside Midway Camp will be located next to Katiktok Lake and an existing airstrip along the tote road, approximately 27 km from Mary River. The Midway camp will consist of a single portable refuge trailer.
- The road is shown on Figure 5.6

Surface Water Direction and Quantity

The catchment areas for the bulk sampling road are shown on Figure 5.6. Ultimately the surface water north of Katiktok Lake discharges in Milne Inlet via Phillips Creek and surface water south of Katiktok Lake eventually flows into Mary River via Camp, Sheardown and Mary Lakes. Specific surface water runoff quantities were not calculated for the transportation corridor due to the large catchment area and the minimal quantity of water required for road construction and maintenance.

The catchment area for the Midway camp is shown on Figure 5.6. Surface water in this area is directed towards Katiktok Lake and is ultimately discharged at Milne Inlet via Phillips Creek (Figure 1.2).

Mitigation Procedures

- The tote road is currently being upgraded to a year-round all-weather road to support a heavier traffic volume during the bulk sample program. Sediment and erosion control measures are installed when required as per the previous section General Mitigation Measures. The area is regularly monitored (as discussed in the Monitoring section of this report).

5.15 ASSOCIATED CONSTRUCTION MATERIAL AND QUARRY OPERATIONS

Description

- Granular material borrow pits (sand and gravel up to cobble sized material) will be developed to support road upgrades for the bulk sampling road and camp infrastructure
- Three primary areas have been identified for borrow pits: Borrow area 1 near Milne Inlet, Borrow area 2 near Midway camp, Borrow area 3 near Mary River camp. In addition to these three primary areas, use will be made of suitable borrow material in areas directly adjacent to the tote road, within the right-of-way.
- Surficial borrow materials will be obtained by stripping / excavation of the active layer
- Processing of borrow materials will be limited to screening using a grizzly and segregation of material into temporary stockpiles
- Excavation will not occur within 30 m of a watercourse, and seasonal drainage ways will be re-established during pit development
- Rock quarries may be developed for various construction purposes
- Potential rock quarry locations are near Milne Inlet and Mary River
- Rock will be obtained through drilling and blasting
- Quarrying will not occur within 30 m of a watercourse, and drainage will be re-established during quarry development
- Acid rock drainage (ARD) and metal leaching (ML) tests have been conducted on rock samples, with results indicating that, due to the physical environment and the geochemistry of the rock, ARD and ML are very unlikely to occur from quarry materials
- No camps
- No fuel storage
- Locations of the primary borrow sites and rock quarries are shown on Figure 5.6.

Surface Water Direction and Quantity

The catchment areas for the borrow and quarry operations are shown on Figure 5.6. Specific surface water runoff quantities were not calculated due to the number of large catchment areas that would be involved.

Mitigation Procedures

Sediment and erosion control measures may be required and will be installed as per the previous section General Mitigation Measures. Berms and other drainage measures will be established as needed to limit erosion and maintain positive drainage to minimize water ponding. Contouring, berming and silt fences will be applied as necessary to ensure sediment and erosion control. The site will be regularly monitored as discussed in the Monitoring section of this report.

SECTION 6.0 - MONITORING

6.1 ROUTINE INSPECTIONS

6.1.1 Drill Sites

Routine inspections of the immediate area surrounding the drills will be completed as part of the safety/environmental inspection on a daily basis by drilling personnel.

Particular items for review are:

- Fuel leaks
- Equipment condition
- Sediment and erosion control measures
- Water intakes
- Water management systems

6.1.2 Camp Sites

Routine camp inspections will be completed.

Particular items for review are:

- Fuel leaks
- Sediment and erosion control structures

6.1.3 Roadways

Routine inspections will be completed along the roadways, particularly the tote road and the access road between the Mary River Camp and Mary River Drilling Area.

Particular items for review are:

- Any rutting by vehicles
- Sediment and erosion control structures

6.1.4 Bulk Sample Open Pit Operations

Routine inspections will be completed at the bulk sample open pit areas.

Particular items for review are:

- Sediment and erosion control structures
- Evidence of ARD and ML

6.1.5 Weathered Ore / Waste Storage Piles

Routine inspections will be completed at the weathered ore/waste storage piles.

Particular items for review are:

- Sediment and erosion control structures
- Evidence of ARD and ML

6.1.6 Temporary Ore Storage at Mary River and Milne Inlet

Routine inspections will be completed at the temporary ore storage areas at Mary River and Milne Inlet.

Particular items for review are:

- Sediment and erosion control structures
- Evidence of ARD and ML

6.1.7 Bulk Fuel Storage Areas

Routine inspections will be completed at the bulk fuel storage areas.

Particular items for review are:

- Evidence of hydrocarbon staining or leaks from containment devices
- Full-time supervision of fuel transfer operations
- Sediment and erosion control structures

6.1.8 Ore Processing Area

Routine inspections will be completed at the ore processing area.

Particular items for review are:

- Sediment and erosion control structures
- Evidence of ARD and ML

6.1.9 Associated Construction Material Quarry Operations

Routine inspections will be completed at the borrow and quarry areas.

Particular items for review are:

- Sediment and erosion control structures

6.2 WEEKLY MONITORING PROGRAM

The weekly monitoring program will be completed by on-site personnel and will involve the following:

- Surface water sampling from the locations shown on Figure 6.1. Additional sample locations will be added as required to ensure representative samples are taken downstream of all activities.

The samples will be shipped for laboratory analysis for the following parameters:

- Calcium, Magnesium, Sodium, Potassium, Aluminium, Arsenic, Boron, Barium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Molybdenum, Nickel, Selenium, Silver, Strontium, Thallium, Vanadium, Zinc, Tin, pH, Conductivity, Alkalinity as $CaCO_3$, TDS (COND-CALC), TSS (total suspended solids), Turbidity, Phenols, $N\text{-}NH_3$, SO_4, Cl, Br,$N\text{-}NO_2$, $N\text{-}NO_3$, $NO_2 + NO_3$ as N, Mercury, Hardness as $CaCO_3$, TOC and DOC

6.3 WEEKLY REPORTING

A weekly report will be compiled for distribution summarizing the results of the weekly monitoring program. The report will include the following:

- A comparison of the sampling results to the Canadian Council of Ministers for the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Aquatic Life
- A summary of any notes and observations made during the monitoring program

The weekly report will be circulated to the appropriate supervisory staff of Baffinland, the drilling contractor and Knight Piésold to allow for operational management requirements should they be necessary, and regulatory agencies contacted if required.

6.4 WASTE DISPOSAL MONITORING

6.4.1 Monitoring Stations

Signs will be posted in appropriate areas at Monitoring Stations, and will be located and maintained to the satisfaction of the Inspector. Monitoring Stations will be maintained at the following locations (Figure 6.1):

Monitoring Station Number	Description	Status
MRY-1	Water supply for Mary River Camp at Camp Lake	Active-volume
MRY-2	Summer water supply for Milne Inlet Camp at Phillips Creek	Active-volume
MRY-3	Summer water supply for Milne Inlet Camp at an unnamed lake along the tote road at km 32 (or 26) (location to be determined)	Active-volume
MRY-4	Mary River camp sewage discharge at WWTF	Active
MRY-4a	Mary River camp sewage discharge from PWSP	
MRY-5	Milne Inlet camp sewage discharge at WWTF	Active
MRY-5a	Milne Inlet camp sewage discharge from the drainage ditch	
MRY-6	Water collected within the Bulk Fuel Storage Facility at Mary River prior to release	
MRY-7	Water collected within the Bulk Fuel Storage Facility at Milne Inlet prior to release	
MRY-8	Minewater and surface drainage either pumped or released from the Hematite Open Pit	Active
MRY-9	Minewater and surface drainage either pumped or released from the Magnetite Open Pit	Active
MRY-10	Surface discharge from weathered ore stockpile	
MRY-12	Surface discharge from the crusher and stockpiles at Mary River	
MRY-13 (a and b)	Surface discharge from lump ore and fine ore stockpiles at Milne Inlet	

6.4.2 Bulk Sample Open Pits

All discharge from the two bulk sample open pits will be analyzed and discharge at Monitoring Stations MRY-8 and MRY-9 will not exceed the following limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Arsenic	0.5	1.00
Total Copper	0.30	0.60
Total Lead	0.20	0.40
Total Nickel	0.50	1.00
Total Zinc	0.5	1.00
Total Suspended Solids	15.0	50.0
Oil and Grease	No visible sheen	N/A
Waste discharged will have a pH between 6.0 – 9.5		

6.4.3 Waste Water Treatment Facility (WWTF)

All sewage will be discharged to the Waste Water Treatment Facility unless otherwise approved.

All sewage discharged from the Waste Water Treatment Facility at Monitoring Stations MRY-4 and MRY-4a will not exceed the following quality standards:

Parameter	Maximum Average Concentration
BOD_5	30 mg/L
Total Suspended Solids	35 mg/L
Fecal Coliform	1000 CFU/100 mL
Oil and Grease	No visible sheen
pH	between 6.0 – 9.5

All sewage discharged from the Waste Water Treatment Facility at Monitoring Stations MRY-5 and MRY-5a will not exceed the following quality standards:

Parameter	Maximum Average Concentration
BOD_5	100 mg/L
Total Suspended Solids	120 mg/L
Fecal Coliform	10,000 CFU/100 mL
Oil and Grease	No visible sheen
pH	between 6.0 – 9.5

6.4.4 Monitoring Station Discharge

Effluent discharged from Monitoring Stations MRY-4 and MRY-4a, and MRY-5 and MRY-5a will be demonstrated to be acutely non-toxic in accordance with test procedures measuring acute lethality to Rainbow trout, Oncorhynchus mykiss (Environment Canada's Environmental Protection Series Biological test Method EPS/1/RM/13) and Daphnia magna (Environment Canada's Environmental Protection Series Biological test Method EPS/1/RM/14). Testing will occur once annually during open water season.

Samples will be collected at Monitoring Stations MRY-4 and MRY-5 every four weeks during discharge and at Monitoring Stations MRY-4a and MRY-5a once prior to discharge and every 4 weeks thereafter. Samples will be analyzed for: Biochemical Oxygen Demand (BOD), total suspended solids (TSS), pH, fecal coliforms, oil and grease (visual).

Samples will be collected at Monitoring Stations MRY-6 and MRY-7 monthly during removal of water from the facilities to address ARD and ML potential as per the Bulk Sampling Management Plan

6.4.5 Bulk Fuel Storage Facilities

Effluent discharged from the Bulk Fuel Storage Facilities at Monitoring Stations MRY-6 and MRY-7 will meet the following effluent quality standards:

Parameter	Maximum Average Concentration (µg/L)
Benzene	370
Toluene	2
Ethyl benzene	90
Lead	1
Oil and Grease	15,000 and no visible sheen

6.5 ADAPTIVE MANAGEMENT STRATEGIES

In 2007, housekeeping and operational measures were instituted at the salt mixing station and increased use of sumps and silt curtains at the exploration drill sites were put in place to further reduce the potential risks for salt related impacts. Work procedures will continuously be adapted with the goal to reduce salt use, reduce water use and reduce the potential effects related to water management on the environment.

Baffinland is committed to continual improvement in its work activities in the aim of reducing risks to the environment and improving operational effectiveness. The strategy employed at Baffinland is regular monitoring supported by operational change and adoption of other mitigating measures if warranted.

SECTION 7.0 - QA/QC PLAN

The Surface Water Sampling Program - Quality Assurance & Quality Control Plan (QA/QC Plan) is included in Appendix C of this report. The QA/QC Plan has been prepared to fulfil the requirement of Part I, Item 9 of the License No. 2BB-MRY0710 issued by the NWB to Baffinland on July 27, 2007.

The QA/QC best practices that are outlined are designed to provide guidance to field staff and analytical laboratories in order to maintain a high level of confidence in the water quality data generated from the Mary River Project. The plan addresses best practice methods for water samples collected from lakes, streams and rivers, treated wastewater effluent, drinking water and site drainage.

For a more detailed and comprehensive outline, please refer to the appended report.

SECTION 8.0 - CERTIFICATION

This report was prepared, reviewed and approved by the undersigned.

Prepared by:

Beth Staben, B.Sc.
Project Scientist

Reviewed by:

Steven R. Aiken, P.Eng.
Manager Environmental Services

Approved by:

Ken D. Embree, P.Eng.
Managing Director

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TABLE 4.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

SITE WATER MANAGEMENT PLAN

REGIONAL STREAM FLOW MONITORING STATIONS

Station Name	Station ID	Period of Record (yrs)	Catchment Area (sq.km)	Operated by
Apex River at Apex near Iqaluit	10UH002	1973 - 1995	58.5	WSC
Allen River near mouth	10VC001	1970 - 1984	448	WSC
Soper River near Kimmirut[1]	10UJ001	1994 - 1999		WSC
Mecham River near Resolute	10VC002	1971 - 1979	86.8	WSC
Marcil Creek near Arctic Bay	10UB001	1978 - 1983	139	WSC

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Notes:

1. Gauging station monitors lake levels.
2. WSC refers to Water Survey of Canada.
3. Blank cells indicate no data available.

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TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

SITE WATER MANAGEMENT PLAN

MARY RIVER AREA - ESTIMATED CATCHMENT RUNOFF RATES

Catchment No.		MR-01	MR-02	MR-03	MR-04	MR-05	MR-06	MR-07	MR-08	MR-09	MR-10	MR-11	MR-12	MR-13	MR-14	MR-15	MR-16	MR-17	MR-18	MR-19	MR-20
	Unit Runoff Rate	Runoff Rate																			
	(cu.m/s/sq.km)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)
Catchment Area (sq.km)		874.50	248.70	6,311.00	217.50	7,663.40	122.97	30.40	9.39	10.45	3.58	5.41	14.70	85.43	114.20	18.02	8.61	1.48	21.75	15.66	73.02
January	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
February	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
March	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
April	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
June	0.0083	7.26	2.06	52.38	1.81	63.61	1.02	0.25	0.08	0.09	0.03	0.04	0.12	0.71	0.95	0.15	0.07	0.01	0.18	0.13	0.61
July	0.0500	43.73	12.44	315.55	10.88	383.17	6.15	1.52	0.47	0.52	0.18	0.27	0.74	4.27	5.71	0.90	0.43	0.07	1.09	0.78	3.65
August	0.0233	20.38	5.79	147.05	5.07	178.56	2.87	0.71	0.22	0.24	0.08	0.13	0.34	1.99	2.66	0.42	0.20	0.03	0.51	0.36	1.70
September	0.0167	14.60	4.15	105.39	3.63	127.98	2.05	0.51	0.16	0.17	0.06	0.09	0.25	1.43	1.91	0.30	0.14	0.02	0.36	0.26	1.22
October	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
November	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
December	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

I:\102-00181-10\Assignment\Report\Report 5, Rev. 0 - Updated Site Water Management Plan\[Table 5.1 to 5.3 - Catchment Runoff Quantities.xls]Table 5.1
25-Oct-07

Note:
1. Unit runoff rate is based on flow estimates at Station H5 from preliminary and uncalibrated rating curve and professional judgement about flows from October to June.

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TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

SITE WATER MANAGEMENT PLAN

MILNE INLET AREA - ESTIMATED CATCHMENT RUNOFF RATES

Catchment No.		MI-01	MI-02	MI-03	MI-04	MI-05	MI-06
	Unit Runoff Rate	Runoff Rate					
	(cu.m/s/sq.km)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)	(cu.m/s)
Catchment Area (sq.km)		5.27	3.59	4.11	62.32	5.61	7.96
January	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
February	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
March	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
April	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
May	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
June	0.0083	0.04	0.03	0.03	0.52	0.05	0.07
July	0.0500	0.26	0.18	0.21	3.12	0.28	0.40
August	0.0233	0.12	0.08	0.10	1.45	0.13	0.19
September	0.0167	0.09	0.06	0.07	1.04	0.09	0.13
October	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
November	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
December	0.0000	0.00	0.00	0.00	0.00	0.00	0.00

I:\102-00181-10\Assignment\Report\Report 5, Rev. 0 - Updated Site Water Management Plan\[Table 5.1 to 5.3 - Catchment Runoff Quantities.xls]Table 5.2

25-Oct-07

Note:

1. Unit runoff rate is based on flow estimates at Station H5 from preliminary and uncalibrated rating curve and professional judgement about flows from October to June.

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TABLE 5.3

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

SITE WATER MANAGEMENT PLAN

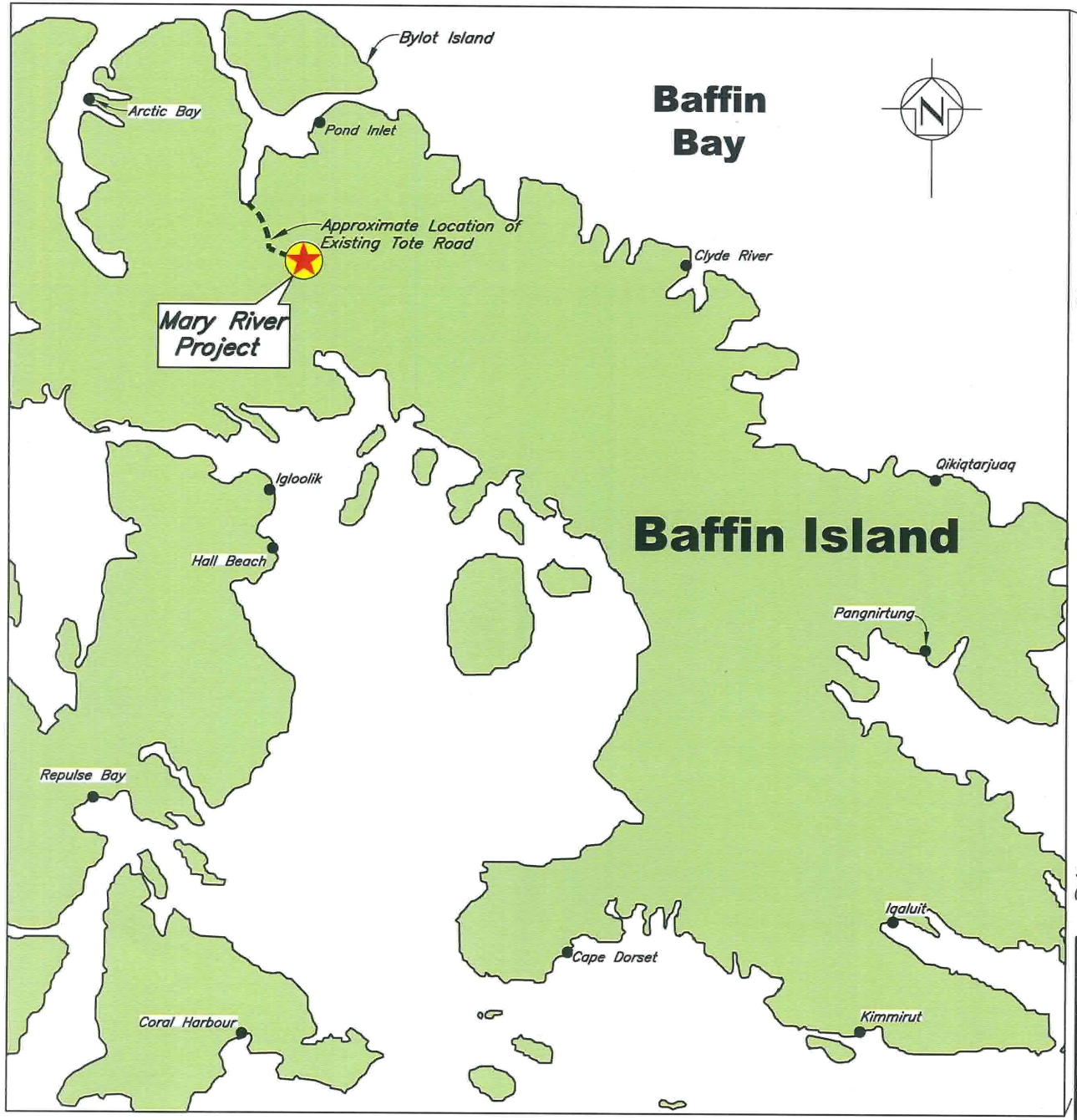
STEENSBY INLET AREA - ESTIMATED CATCHMENT RUNOFF RATES

Catchment No.		SI-01	SI-02	SI-03
	Unit Runoff Rate	Runoff Rate		
	(cu.m/s/sq.km)	(cu.m/s)	(cu.m/s)	(cu.m/s)
Catchment Area (sq.km)		13.68	21.77	1.99
January	0.0000	0.00	0.00	0.00
February	0.0000	0.00	0.00	0.00
March	0.0000	0.00	0.00	0.00
April	0.0000	0.00	0.00	0.00
May	0.0000	0.00	0.00	0.00
June	0.0083	0.11	0.18	0.02
July	0.0500	0.68	1.09	0.10
August	0.0233	0.32	0.51	0.05
September	0.0167	0.23	0.36	0.03
October	0.0000	0.00	0.00	0.00
November	0.0000	0.00	0.00	0.00
December	0.0000	0.00	0.00	0.00

ıent\Report\Report 5, Rev. 0 - Updated Site Water Management Plan\[Table 5.1 to 5.3 - Catchment Runoff Quantities.xls]Table 5

25-Oct-07

Note:
1. Unit runoff rate is based on flow estimates at Station H5 from preliminary and uncalibrated rating curve and professional judgement about flows from October to June.



LEGEND:

Water

Existing Community

Scale (Approx.) 65 32.5 0 65 130 195 260 325 Km

Baffinland

MARY RIVER PROJECT

PROJECT LOCATION MAP

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P/A NO.	REF.	REV.
NB102-00181/10	5	0

FIGURE 1.1

XREF FILE(S): Basemap; Transportation routes; XREF1; Deposit Boundaries IMAGE FILE(S): Baffinland logo-big corp Baffinland logo_new

LEGEND:

- Water
- Mineral Lease Boundary
- River/Stream/Drainage
- Existing Tote Road
- Project Site Locations

NOTES:

1. Base Map © Her Majesty the Queen in Rights of Canada, Department of Natural Resources (2004). All rights reserved (Governement of Canada, 2006).
2. Coordinate grid is shown in UTM (NAD 83) Zone 17 West and is in metres.
3. Contours are in metres. Contour interval varies.

Scale 6 3 0 6 12 18 24 30 Km

Baffinland

MARY RIVER PROJECT

PROJECT STUDY AREA

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P/A NO.	REF.	REV.
NB102-00181/10	5	0

FIGURE 1.2

NORTH BAY ON. CREATED BY: rjohnson SAVED: I:\102-00181-10\Assignment\Acad\Fig\B90RO, 10/25/2007 1:46:09 PM PRINTED: 10/25/2007 1:47:20 PM, Bpark