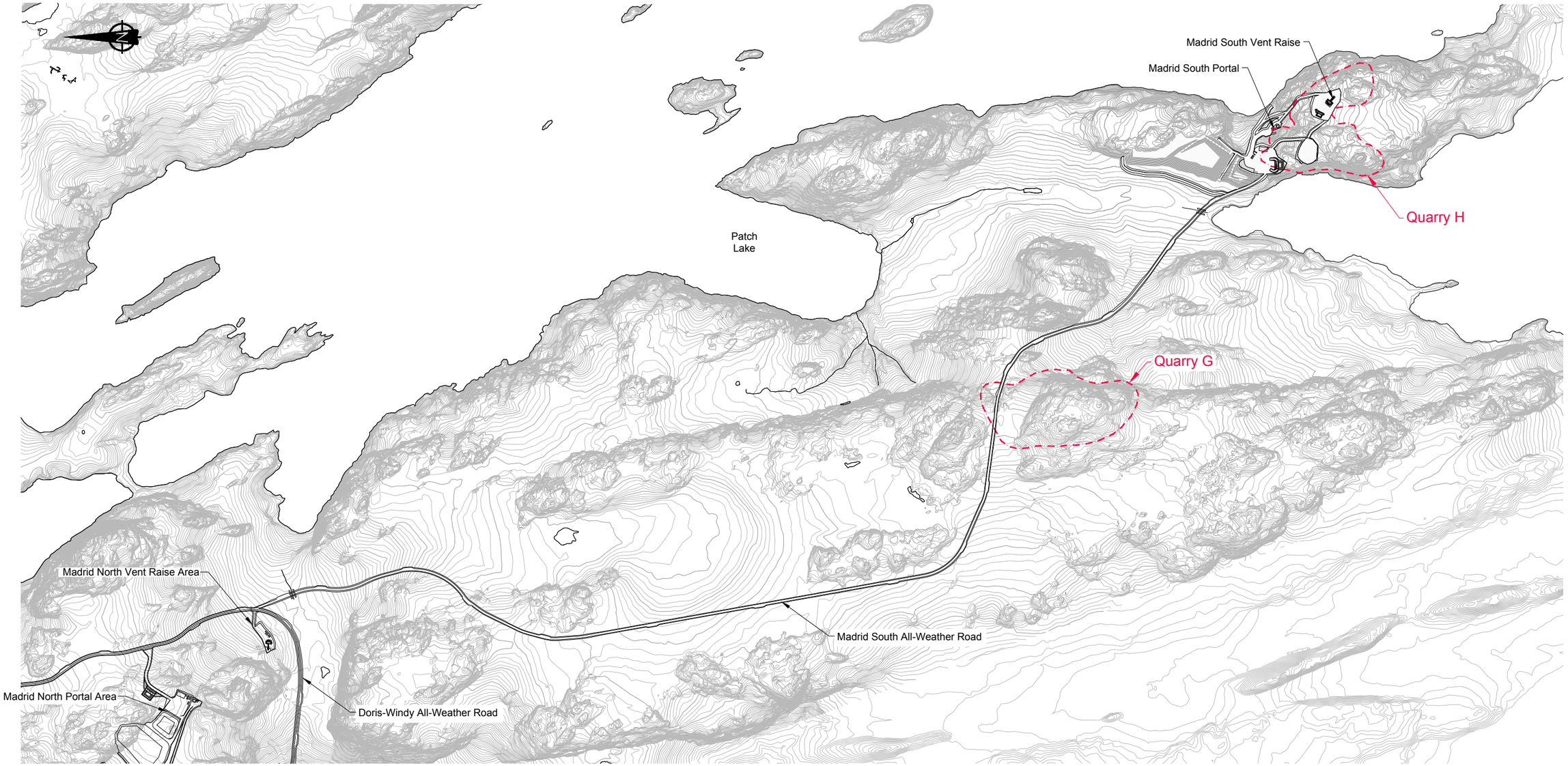

LEGEND

Existing Approved and Permitted Quarry

NOTES

1. Topographic contour data for the terrain model were provided by Hope Bay Mining, and is based on 2007 Aerial Photography. Contour intervals are 0.5m.
2. The co-ordinate system is UTM NAD 83, Zone 13.
3. All dimensions are in metric units, unless specifically mentioned.

0 100 200 300 400 500
Scale in Metres

srk consulting

SRK JOB NO.: 1CH022.016
FILE NAME: 1CT022.016_Windy-Madrid South.dwg

TMAC RESOURCES

HOPE BAY PROJECT

Quarry Management Plan

Quarry G and H Locations

DATE:	APPROVED:	FIGURE:
Feb. 2017	LW	3

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1.3. RELEVANT LEGISLATION AND GUIDANCE

Worker health and safety and operational components of the Plan are part of TMAC's mine plan and come under the jurisdiction of the Nunavut Mines Inspector. Environmental elements of the Plan come under the jurisdiction of the Nunavut Water Board (NWB), the Nunavut Impact Review Board (NIRB) and other regulatory agencies.

Implementation of the Plan in part should be considered alongside the following relevant legislation:

- Workers Safety and Compensation Commission (WSCC) Chief Mines Inspector as per Mine Health and Safety Act, and its associated Regulations (Government of Nunavut, 1995).

1.4. RELATED DOCUMENTS

Table 2: List of Documents Related to the Hope Bay Quarry Management and Monitoring Plan

Document Title	Year	Relevance
Hope Bay Project Groundwater Management Plan	2016a	Includes underground disposal management
Waste Rock and Ore Management Plan	2016b	Includes monitoring of waste rock and related seepage
Quality Assurance and Quality Control Plan	2017	Detailed QA/QC procedures
Closure and Reclamation Plan	2016c	Includes closure activities

1.5. PLAN MANAGEMENT

Revisions to the Plan can be triggered by activities such as changes in the mine plan, operational performance, personnel or organizational structure, mine ownership, regulatory or social considerations, and life cycle or design philosophy. The Plan is reviewed annually and is revised or updated as necessary in accordance with changing circumstances.

Overall responsibility for the Plan implementation lies with the Surface Manager. The functional site-based lead for assigning and applying appropriate resources to execute the Plan rests with the Surface Superintendent. The Environmental Manager and Coordinator are responsible for day-to-day execution of activities associated with the Plan.

1.6. ROLES AND RESPONSIBILITIES

Table 3 shows the roles and responsibilities for the Quarry Management Plan.

Table 3: Roles and Responsibilities

Surface Manager	• Responsible for the management and operations of the quarries and for providing the necessary resources to manage the quarries.
Surface Superintendent	• Implementing the Plan; • Providing onsite resources to operate the quarries; • Providing onsite resources to conduct geological/geochemical inspections; • Conducting and documenting regular inspections; • Ensuring that water treatment and discharge activities take place as requested by ESR and logs of discharge quantities and locations are provided to ESR; and • Providing input on the modifications in the design and the operation of the quarries.

Environmental Manager	• Updating the Plan; • Providing the necessary resources for completing the water sampling programs; • Liaise with Indigenous and Northern Affairs Canada (INAC inspector) prior to water discharge; • Coordinate: - Construction Monitoring Report; - Waste Rock and Quarry Monitoring Report; - Construction Summary Report; - Monthly Monitoring Report; and - Annual Geotechnical Inspection Report
Environmental Coordinator	• Ensuring water sampling programs are completed as needed; • Ensuring internal records are kept of the quantities of rock excavated from the quarries; • Weekly visual inspections; and • Keeping records of on-site analysis, observations, photographs, water discharge activities and laboratory analysis.

2. QUARRY MANAGEMENT

2.1. PRE-DEVELOPMENT

Quarry Material Characterization

Geochemical characterization studies of all potential quarry sites for the Hope Bay Project have been presented in AMEC (2005), and SRK (2007, 2008, 2011 and 2014).

Based on these geochemical characterization programs, the material from the quarries in Table 1 is considered to have a low potential for acid rock drainage (ARD) generation based on NP/AP ratios and low sulphur content. Accordingly, material from these quarries is suitable to be used as construction material.

Archaeology Survey

Archaeological surveys of the quarries and the all-weather road routes were conducted. Based on the results of the survey, buffers were established to ensure that the development of quarries and all-weather roads do not impact any archaeological sites.

TMAC provides training on “chance-find” procedures to relevant field staff to ensure that any archaeological sites that were not identified during pre-development surveys are recognized and treated in an appropriate manner (i.e. SOP for Archaeological Site Protection, and Hope Bay Archaeology Awareness for Field Workers).

2.2. OPERATIONS

Residual Explosives

The majority of the rock fill will be blasted using an Ammonium Nitrate (AN) and fuel oil mixture blasting product (ANFO).

The potential for wet-holes in the quarries is considered to be low due to the land-based nature of the quarry sites and the presence of permafrost below the outcrops. The potential for wet holes will be assessed at the time of drilling and again at the time of loading each blast hole. The blaster responsible for loading and firing the drilled pattern begins the loading process by walking the entire pattern and checking the actual drilled depth of each hole versus the plan and noting any conditions such as water in each hole. This information is recorded on the blast pattern record sheet required by regulation to

determine the amount and type of explosive and delay detonators required in each hole. The presence of water in any drill hole requires one of several approaches to be taken to ensure proper and complete explosive detonation. ANFO designed for proper detonation in wet holes is available and can be used. Alternatively, dewatering the hole using a down hole dewatering pump and truck so that a poly borehole liner can be lowered into the hole and ANFO poured inside the bag is another approach which can be implemented.

In the event that an incomplete detonation of the product occurs, it is likely that an orange colour smoke plume would be observed rising from the affected area. The blaster is required by the regulations to inspect the blasted area, make note of blast holes that may have experienced incomplete detonation and mark those locations with flagging.

Information from the blaster's inspection will be noted in the blast pattern log and the daily operations shift log communicated to all field supervision personnel. The flagged off area will remain until the excavation equipment advances to within half the hole spacing distance at which time the suspect material would be more closely inspected for the presence of ANFO.

Contingency - Identification of Un-detonated or High ANFO Residue Areas

Material considered un-detonated or high in ANFO residue, which will contain potentially elevated levels of nutrients (primarily ammonia) will be selectively excavated and hauled to an established waste rock management area with any runoff from the area reporting to Pollution Control Ponds for ultimate disposal in the Tailings Impoundment Area (TIA).

Contingency - Spill of ANFO

In the unlikely event that a spill of the ANFO occurs during the charging of the holes for blasting, all activities within the quarry will be suspended until the clean-up is complete. The clean-up of the spilled material will be initiated immediately and the material disposed of in accordance with the Explosives Management Plan.

Blast Management

The quarry sites have been deemed suitable for use provided that the archaeological site buffer zone is kept intact; therefore, due care will be taken in order to maintain the integrity of these sites. The blasts will be designed to shoot away from the potentially impacted archaeological sites. Prior to any blast, the rock face will be cleaned to minimize the potential of fly rock.

Single hole delays will also be used for maximum shot placement away from any identified archaeological sites and row timing will be increased to prevent back break and ensure all rock is moving in a forward motion away from the archaeological sites.

As an additional precaution, the blast limits will be set 60 m from the recommended 30 m buffers zones located in the quarries. This extra buffer will offer further protection from any possible disturbance to archaeological sites.

Precipitation/Snow Melt Water Management

The development of each quarry will proceed in a manner that, to the extent possible, ensures that all water entering the quarry as a result of precipitation or snow melt is retained within the quarry boundaries. Generally, this will be accomplished by ensuring that the quarry floors are sloped toward a natural low area of the quarry and, if required, the creation of a quarry sump to collect the waters and settle out suspended solids.

In the event that the quarry sump requires pumping, a sample of the ponded water will be collected, preserved in the appropriate manner, and submitted to an accredited laboratory for the analysis of specified parameters. These parameters are outlined in the relevant Water Licences. Table 4 presents the quarry effluent quality limits as stated in Part D Item 18 of Water Licence 2BE-HOP1222.

Additionally, notification will be provided to the Inspector, at least ten (10) days prior to the planned pumping (as per Part D, Item 16 of 2BE-HOP1222). The notification will include the volume proposed for discharge and the discharge location. Following receipt of the laboratory results, water meeting the discharge requirements will be discharged.

Table 4: Quarry Effluent Quality Limits (Part D Item 18 of Water Licence 2BE-HOP1222)

Parameter	Maximum Average Concentration	Maximum Concentration in Any Grab Sample
pH	6.0 to 9.0	9.0
Electrical Conductivity	500 µS/cm	500 µS/cm
Total Ammonia	2 mg/L	4 mg/L
Total Suspended Solids	15 mg/L	30 mg/L
Oil and Grease	5 mg/L and no visible sheen	10 mg/L and no visible sheen
Total Aluminum	1.0 mg/L	2.0 mg/L
Total Arsenic	0.05 mg/L	0.10 mg/L
Total Copper	0.02 mg/L	0.04 mg/L
Total Iron	0.30 mg/L	0.60 mg/L
Total Lead	0.01 mg/L	0.02 mg/L
Total Nickel	0.05 mg/L	0.10 mg/L
Total Zinc	0.01 mg/L	0.02 mg/L

Care will be taken not to disturb settled solids in the bottom of the sump and pumping of the sump will only take place when conditions are suitable. Care will also be taken to ensure that discharged water does not enter fish bearing waters and that the pump discharge is positioned in a manner that minimizes erosion and siltation of the area downstream of the discharge.

Contingency - Sump Water Requires Special Handling

In the event that the quarry water does not meet the discharge criteria, an inquiry of the cause of the noted exceedance will be conducted, and appropriate mitigation developed. Any non-compliant water that needs to be discharged would be transported to Pollution Control Ponds for management and/or transported directly to the Doris North TIA for disposal.

All compliant and non-compliant monitoring results are summarized in the monthly SNP reports to the NWB and a copy is provided to the Inspector. This monthly report would include details of the disposal of any non-complaint water.

Dust Management

The major source of dust generation during the operations of the quarries will be in the vicinity of the crusher while it is operating. Dust suppression, where required, will consist of using water as permitted

by the relevant Water Licence. A record of the volume of water used for this purpose will be maintained.

Equipment Re-fuelling

Re-fuelling of equipment operating in one of the active quarries will be conducted in a manner that will ensure that any spill of fuel or lubricants is effectively contained within the quarry area and clean-up is easily accomplished. During this activity, all re-fuelling equipment will be equipped with a Spill Kit suitable for the materials being handled and a functioning fire extinguisher suitable for the materials being transferred.

Contingency - Spill during Re-fuelling

In the unlikely event that a spill does occur during re-fuelling activities, clean-up of the spilled material will be initiated immediately and all activities within the quarry suspended until the clean-up is complete. The material will be disposed of in an appropriate manner as per the requirements specified in the Hope Bay Project Spill Contingency Plan.

2.3. POST-OPERATIONS

Once quarrying activities in each individual quarry are completed, all equipment, materials and supplies will be removed for appropriate reuse or disposal. Vertical walls within the mined out quarry will be inspected to ensure that they do not pose an unreasonable safety risk and, if required, remediation activities undertaken to address residual safety concerns.

The quarries may be used for laydown areas or for the development of other infrastructure components. In the event that a particular mined out quarry is to be re-commissioned or employed in a new role, appropriate applications will be made to the respective regulatory authorities.

3. OPERATIONAL INSPECTIONS AND MONITORING

3.1. QUARRY OPERATIONS

Quarry Visual Inspections

During quarrying operations, a visual inspection of the quarry face to verify the geological characteristics of the rock will be conducted by a qualified field geologist or geochemist at least once per week. The purpose of the inspection will be to confirm the presence of the expected rock types and that disseminated sulphides only (e.g. not veins) are being exposed and therefore used in construction. A secondary objective of the inspection will be to confirm the absence of any fibrous forms of actinolite in the quarry material.

Prior to the inspections, site personnel will ensure that it is safe to work within the quarry and will inform any vehicle operators as to the location and timing of the inspection work.

The inspectors will walk from one side of the quarry around to the other side examining both the surface and the exposed bedding material along the side of the quarry for any anomalous rock types or significant amounts of sulphide. If present, these materials will be examined, described, and located on a map. In addition, at regular 100 metre intervals, the inspector will stop and complete a close inspection of the rocks, breaking open several rock clasts and describing what they see. The results of each inspection will be recorded on data sheets, and reported in the Construction Monitoring Report submitted by March 31 of the year following construction.

Contingency - Identification of Inappropriate Quarry Rock

In the unlikely event that the visual inspection identifies PAG rock, the geologist will "tag" the material for avoidance or removal. If the material is excavated, it will be transported to a waste rock storage area for disposal underground. If this is not possible at the time, the PAG rock will be buried in an active or previously mined-out quarry. If the PAG material is buried, it will be covered with a minimum of 2 metres of rock material that is approved for construction and will be clearly marked as inappropriate for use as construction material. In the quarry stored rock, permafrost is expected to slowly aggrade into the rock fill, slowing the rates of sulphide oxidation substantially, and eventually shutting off seepage pathways. The clean rock cover would act as a thermal blanket to keep the active freeze/thaw zone away from the more reactive rock.

In the unlikely event that the visual inspection identifies fibrous actinolite, the geologist will "tag" the material for avoidance or removal. If the material is excavated, it will be transported to a waste rock storage area for disposal underground. If this is not possible at the time, the material will be buried in one of the previously mined-out quarries and covered with a 1.0 m layer of benign rock and a record of the location maintained.

Quarry Rock Sampling

During quarrying activities, blast material from each active quarry will be collected at two different stages of quarry development per year. During each collection event, a whole rock sample and a sample of the same material sieved to pass a less than 2 mm screen will be submitted to an accredited external lab for sulphur analysis. This sampling method and frequency will result in up to 4 samples from each active quarry per year. The sample locations will be pre-determined to ensure that they reflect a random selection of the rock fill material used in road construction. In the event that the results return a sulphur value of greater than (>) 0.1 % sulphur, the samples will be subjected to ABA and other confirmatory test work including shake flask extraction tests on a representative subset of samples.

The objective of this program will be to confirm previous rock characterization results and to assess the ARD potential of the fine fraction, which tends to concentrate sulphide minerals.

The results of the analysis will be reported in the Waste Rock and Quarry Monitoring Report (which is referenced in the Construction Monitoring Report) and submitted by March 31 of the year following construction. The report will include a discussion and interpretation of the geochemical data collected.

Quarry Sump Monitoring

After significant precipitation events, the quarry area will be inspected and the water level in the quarry sump assessed. In the event that the quarry sump requires pumping, the procedures or contingencies outlined in Section 2.2 of this plan will be followed.

Blast Vibration Monitoring

Shock waves from blasting in close proximity to fish bearing water can lead to potential for causing detrimental shock wave effects on fish. Guidelines for the use of explosives in or near Canadian fisheries waters (Wright and Hopky 1998) indicate that "*no explosive shall be detonated in or near fish habitat that produces, or is likely to produce, an instantaneous pressure change (i.e., overpressure) greater than 100 kPa (14.5 psi) in the swimbladder of a fish*". The guidelines also provide specific methods for calculating the setback distance required to stay below this threshold based on different amounts of explosive and the type of substrate. To ensure that there are no detrimental effects on fish from quarry activities, these guidelines will be used to establish final setback distances for each of the quarries. Additionally, blast vibration monitoring will be undertaken to avoid potential effects when detonation

distances approach the recommended setbacks to ensure appropriate vibration thresholds that are protective of fish and vulnerable life stages of fish are maintained.

Dust

The major source of dust generation during the operations of the quarries will be from the crusher when it is operating. Passive (observation) dust monitoring after blasting in all quarries and during operations of the crusher will be limited to an assessment conducted during the other regularly scheduled visual inspections of operations (i.e. the pre-blast inspection, the post blast inspection, and regular environmental personnel inspections). The results will be recorded by the site personnel. Dust suppression will be limited to the application of clean water at above freezing temperatures to affected areas and a record of the volume of water used for this purpose will be maintained. .

3.2. INFRASTRUCTURE AND ALL-WEATHER ROADS

Visual Inspection

During all construction activities a visual inspection by site personnel will be conducted of the quarries, equipment storage and re-fuelling areas, construction areas and the advancing area of road construction activity at least once per week. The inspection will focus on identification and removal of foreign and/or spilled materials, assessing the extent of erosion and sedimentation resulting from rock placement (particularly during periods of precipitation), the extent of dusting and the transport of dust onto the surrounding tundra.

In addition, an inspection of each watercourse crossing along the all-weather roads throughout the annual ice-free period will be conducted in order to confirm structural integrity, confirm soil and permafrost stability in the immediate area and to confirm that the crossings have been located adequately with respect to the watercourses.

A record of the date, place and results of each inspection will be maintained as will a photographic record of “items of interest” (i.e. dusting, wildlife encounters, spilled material, etc.) identified during the inspection.

4. POST-CONSTRUCTION INSPECTIONS AND MONITORING

4.1. QUARRY

A visual inspection of each mined out quarry will be completed at least once per year in order to ensure that the site remains safe and no environmental or public health and safety concerns have developed. In the event that potentially acid generating waste rock has been placed in one or more of the mined-out quarries, the area will be inspected to ensure that the 2 meter cover remains intact and that seeps from the material are not in evidence.

In the event that the inspection identifies ponded water within the mined-out quarry in sufficient volume to require pumping, the procedures or contingencies outlined in Section 2.2 of this Plan will be followed.

Records of the inspections and findings of each will be maintained and reported in the appropriate manner.

4.2. INFRASTRUCTURE AND ALL-WEATHER ROADS

Following completion of the construction of the road and pad areas, an inspection will be conducted by a qualified field geologist or geochemist in order to characterize the rock used in construction and to

identify and sample ephemeral seeps occurring through the road construction material. The objective of this program will be to confirm that an environmentally-significant level of metal leaching (ML) is not occurring from the road materials.

In the event that clean quarry rock from any of the quarries is used in the construction of additional infrastructure, the area in which the rock is used will be incorporated in the ongoing seep and rock sampling program. The monitoring and sampling will be completed in order to ensure that the highest regulated requirement for the management of construction rock is uniformly applied throughout the Hope Bay Belt.

Seep Survey and Sampling

Seep surveys will be conducted during the spring freshet in the year following completion of construction. Seeps will be located by walking along the downstream side of the roads and infrastructure, looking, and listening for signs of flowing water. In low-lying areas where the direction of surface water flow is not evident, both sides of the structure will be inspected. Where surface flows are identified, the upstream side will be inspected to determine whether the flow originates from the upstream side or whether it is likely to originate from within the rock fill material. Most samples will target the latter, more ideal type of seep. However, a modest number (maximum of one location for every 2 km of road) will be collected at locations where there is moderate upstream flow component. In these cases, samples will be collected from both upstream and downstream of the roads.

At a minimum, a water sample will be collected from 10% of the identified ephemeral seeps (regardless of the field measurement values) appropriately preserved and submitted for laboratory analysis.

All of the samples collected will be preserved in an appropriate manner, labelled and submitted to an accredited laboratory for analysis of pH, TDS, acidity and/or alkalinity, sulphate, total ammonia, nitrate, and a full suite of dissolved metals by ICP-MS. The results of the seep survey will be reported in the Waste Rock and Quarry Monitoring Report (which is referenced in the Construction Monitoring Report) and submitted by March 31 of the year following construction. The report will include a discussion of the interpretation of the geochemical data collected.

Infrastructure Material Sampling

Rock characterization and sampling will be conducted once construction of the road and pad areas is completed by a qualified field geologist or geochemist to characterize the rock used in construction. Samples of in situ rock fill will be collected from pre-determined points of the infrastructure (approximately 1 sample per 0.5 kilometres of road, and five samples from each of the pad areas). At each sample location, a whole rock sample will be collected as well as a -2 mm sieved sample when available. The sample locations will be pre-determined to ensure that they reflect a random selection of a representative sample of the in situ rock fill from each quarry used to construct the road and pad areas.

All of the samples will be submitted to an accredited external lab for sulphur analysis. In the event that the results return a sulphur value of greater than (>) 0.1 % sulphur, the samples will be subject to ABA and shake flask extraction tests on a representative subset of samples. Testing will be completed on both the fines and the whole sample.

The objective of this program is to confirm previous rock characterization results and assess the ARD potential of the fine fraction, which tends to concentrate sulphide minerals.

The results will be reported in the Waste Rock and Quarry Monitoring Report (which is referenced in the Construction Monitoring Report) and will include a discussion and interpretation of the geochemical data collected.

Contingency - Inappropriate Construction Material Identified

In the unlikely event that the results of the seep monitoring/sampling program or the road material sampling program indicate the presence of potential ML or ARD further investigations will be undertaken to define the extent and assess the potential impacts of the material. If warranted, and after discussion with the appropriate regulatory agencies, the material will be excavated and hauled to a waste rock storage area or temporarily stored in one of the previously mined-out quarries prior to eventual disposal underground. The quarry stored rock fill will be placed within the quarry and covered with a minimum of 2 m of rock material that is approved for construction and will be clearly marked as inappropriate for use as construction material. Permafrost is expected to slowly aggrade into the rock fill, slowing the rates of sulphide oxidation substantially, and eventually shutting off seepage pathways. The clean rock cover will also act as a thermal blanket to keep the active freeze/thaw zone away from the more reactive rock.

QA/QC Procedures for Water Sampling

Quality assurance and quality control (QA/QC) is a set of operating principles that, if strictly followed during sample collection and analysis, will produce data of known and legally defensible quality.

Sampling procedures include:

- Using clean sampling gloves for each composite sample;
- Cleaning sampling equipment between each composite sample;
- Collecting samples using bottles and jars provided by the laboratory following the instructions provided by the laboratory for each parameter type;
- Labelling sample containers clearly with the sample station, date, time, and analysis requested;
- Keeping samples cool and dark during storage and shipment to the laboratory; and
- Checking field notes for accuracy and completeness at the end of each sampling session.

Detailed QA/QC procedures are available in the Quality Assurance and Quality Control Plan (TMAC 2017).

4.3. SUMMARY OF INSPECTIONS AND MONITORING

Table 3 provides a summary of the monitoring required during and after quarry mining and construction of the new roads or infrastructure areas.

Table 5: Hope Bay Quarry & All-Weather Road Monitoring Summary

Aspect	Monitoring Activity	Monitoring Type	Data Management & Reporting
Pre-development	Geochemical characterization of quarry material.	Sample and analysis of rock.	Complete (see summary in Section 2.1).
	Archaeological survey.	Field inspections and establishment of buffers.	Survey report kept on file.
Quarry Operations	Pre-blast inspection.	Identify "wet holes" and clean spilled ANFO.	Maintain field notes.
	Post-blast inspection.	Confirm ANFO consumption (minimal misfires).	Maintain field notes.
	Weekly visual inspection by field geologist or geochemist when quarry is active (Section 3.1).	Confirm rock types (no fibrous actinolite) and presence of disseminated sulfides (not veins).	Maintain field notes. Report results in subsequent Waste Rock and Quarry Monitoring Report.
	Representative samples of blast material (whole rock and screened) during quarry operations, sampled twice per annum for each active quarry.	Sulphur analysis and, if required, ABA and shake flask extraction analysis of representative subset of samples.	Maintain field notes. Report results in subsequent Waste Rock and Quarry Monitoring Report.
	Weekly inspection by site personnel (Section 3.2).	Visual inspection.	Maintain field notes on inspection time and results.
	Amount of material quarried and amount removed.	Amount of material quarried in m^3. Amount of material removed in m^3.	Maintain record and annual reporting to Kitikmeot Inuit Association.
Post-precipitation Event	Inspect quarry for ponded water (sump).	If ponded water is present and in quantities requiring discharge, collect sample for discharge criteria screening.	Maintain field notes. Report results in monthly monitoring reports.
	Prior to pumping and discharge of sumps.	Water sample collected prior to discharge and submitted for analysis of parameters outlined in Table 4.	Notification of Inspector at least fifteen (15) days prior to the planned pumping – Notification will include the volume proposed for discharge and the discharge location. Results of water quality sampling reported in monthly monitoring reports.
Post-Construction	Representative samples of *in situ* construction material (1 per 0.5 km, and 5 per pad area). Samples to include whole rock and screened (-2 mm) samples, where possible).	Sulphur analysis and, if required, ABA and shake flask extraction analysis of representative subset of samples	Maintain field notes. Report results in subsequent Waste Rock and Quarry Monitoring Report.
	Field identification of seeps &/or runoff from road and pads during spring freshet (two years).	Field pH and EC of seeps and runoff Field pH and EC at reference site.	Maintain field notes. Report results in subsequent Waste Rock and Quarry Monitoring Report.
		Water sample submitted for pH, TDS, Total Sulphate, Total Ammonia, Nitrate, Alkalinity, ICP-MS Dissolved Metals Scan.	Maintain field notes. Report results in subsequent Waste Rock and Quarry Monitoring Report.
	Annual inspection of mined out quarries. Determine if ponded water is present.	If ponded water must be discharged, collect sample as per Section 2.2 and relevant water licence.	Maintain field notes. Results of water quality sampling reported in monthly monitoring reports.
	Inspection of watercourse crossings along the all-weather road during ice-free period.	Structural Integrity, soil and permafrost stability and confirmation of appropriate location.	Maintain field notes. Report results in Annual Geotechnical Inspection Report.

5. REPORTING

The following reports will be prepared in accordance with the relevant water licences and the KIA Framework Agreement:

- Annual Construction Monitoring Report;
- Annual Waste Rock and Quarry Monitoring Report;
- Construction Summary Reports;
- Monthly Monitoring Report; and
- Annual Geotechnical Inspection Report.

All of the aforementioned reports are to be submitted no later than March 31 of the year following construction, with the exception of the Monthly Monitoring Report, which is submitting on a monthly basis.

6. QUARRIES CLOSURE

The quarries will be decommissioned at mine closure, upon full utilisation of the available materials, or when the quarry is deemed no longer required or re-purposed for a different land use by TMAC. The quarries will be decommissioned and reclaimed. All vertical faces in the quarries will be scaled. Safety berms will be left in place. The area of each quarry will be inspected by a qualified inspector, to ensure no loaded holes are remaining on-site

Details of the closure activities are available in the relevant Closure and Reclamation Plan.

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