

Appendix A Doris-Madrid Interim Closure and Reclamation Plan Comparison

DRAFT

Doris-Madrid Interim Closure and Reclamation Plan Comparison

Hope Bay, Nunavut, Canada
Agnico Eagle Mines Limited

SRK Consulting (Canada) Inc. ■ CAPR002317 ■ February 2023



DRAFT

Doris-Madrid Interim Closure and Reclamation Plan Comparison

Hope Bay, Nunavut, Canada

Prepared for:

Agnico Eagle Mines Limited
10 200, route de Preissac
Rouyn-Noranda, QC, J0Y 1C0
Canada

+1 819 759 3700
www.agnicoeagle.com



Prepared by:

SRK Consulting (Canada) Inc.
1066 West Hastings Street, Suite 2200
Vancouver, BC V6E 3X2
Canada

+1 604 681 4196
www.srk.com



Lead Author: Megan Miller, PEng **Initials:** MMM

Reviewer: Peter Luedke, PEng **Initials:** PL

File Name:

HopeBay_RCPCurrentStatusComparison_CAPR002317_20230216_DRAFT.docx

Suggested Citation:

SRK Consulting (Canada) Inc. 2023. Doris-Madrid Interim Closure and Reclamation Plan Comparison. DRAFT. Prepared for Agnico Eagle Mines Limited: Rouyn-Noranda, QC. Project number: CAPR002317. Issued February. 2023.

Copyright © 2023

SRK Consulting (Canada) Inc. ■ CAPR002317 ■ February 2023



Disclaimer. SRK Consulting (Canada) Inc. has prepared this document for Agnico Eagle Mines Limited, our client. Any use or decisions by which a third party makes of this document are the responsibility of such third parties. In no circumstance does SRK accept any consequential liability arising from commercial decisions or actions resulting from the use of this report by a third party.

The opinions expressed in this document have been based on the information available to SRK at the time of preparation. SRK has exercised all due care in reviewing information supplied by others for use on this project. While SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information, except to the extent that SRK was hired to verify the data.

Contents

1	Introduction	1
1.1	Scope.....	1
1.2	Organization	2
2	Description of Mine Facilities.....	3
2.1	Underground Mine Workings.....	3
2.2	Waste Rock Dumps, Ores Stockpiles, and Overburden Piles	3
2.3	Tailings Impoundment Area.....	4
2.4	Buildings and Equipment.....	5
2.5	Mine Infrastructure.....	5
2.6	Quarry #3 Landfills	6
2.7	Water Management Systems	6
3	Permanent Closure and Reclamation Requirements	7
3.1	Underground Mine Workings.....	7
3.2	Waste Rock Dumps, Ore stockpiles, and Overburden Piles.....	7
3.3	Tailings Containment Area	8
3.4	Buildings and Equipment.....	8
3.5	Mine Infrastructure.....	8
3.6	Quarry #3 Landfill	9
3.7	Water Management Systems	9
	References.....	11

Tables

Table 1:	Summary of the State of Underground Mine Workings Prior to Closure for LOM and Current Conditions	3
Table 2:	Summary of the State of WRD, and Overburden Piles Prior to Closure for LOM and Current Conditions	4
Table 3:	Summary of the State of TIA Prior to Closure for LOM and Current Conditions	5

Figures

- Figure 1: Site Location Map
- Figure 2: General Arrangement Work Breakdown Structure
- Figure 3: Roberts Bay Area Work Breakdown Structure
- Figure 4: Airstrip and Reagent Pad Area Work Breakdown Structure
- Figure 5: Quarry 2 Area Work Breakdown Structure
- Figure 6: Doris Camp Area Work Breakdown Structure
- Figure 7: TIA Area Work Breakdown Structure
- Figure 8: Quarry A and Windy Camp Area Work Breakdown Structure
- Figure 9: Naartok Area Work Breakdown Structure
- Figure 10: Madrid North Portal Area Work Breakdown Structure

Appendices

Figures

Appendix A Complete Listing of Facilities

1 Introduction

The Hope Bay Project (the Project) is a gold mining and milling undertaking of Agnico Eagle Mines Limited. The Project is situated east of Bathurst Inlet approximately 700 km northeast of Yellowknife and 150 km southwest of Cambridge Bay in Nunavut Territory. The Project comprises three distinct areas of known mineralization, Doris, Madrid (North and South), and Boston. The Roberts Bay area is the transportation base, located on tidal water at the northern extremity of the project.

Construction of Project infrastructure started in 2007 at Roberts Bay and Doris, and underground development at Doris commenced in 2010. Existing infrastructure includes:

- Barge offloading facilities, fuel storage facilities, and laydown areas at Roberts Bay;
- Access road, airstrip and laydown areas between Roberts Bay and Doris;
- Mining infrastructure at Doris, including portal, process plant, camp and administration facilities, laydown areas, ore and waste rock storage and contact water control ponds;
- Access road between Doris and Doris tailings impoundment area (TIA), including vent raise pads;
- Doris TIA, consisting of North Dam, South Dam, Interim Dike (under construction), explosives storage area and access road;
- Access road between Doris and Madrid North, and associated quarries;
- Decommissioned exploration camp at Windy;
- Decommissioned Patch Lake workshop area;
- Exploration camp, including portal, waste rock and ore piles, and airstrip at Boston;
- Exploration facilities, including portal, portal pad and waste rock storage and contact water control ponds and sumps at Madrid North; and
- Crown Pillar recovery trenches at Doris and Madrid North.

On March 30, 2022 the Project went into Care and Maintenance. In accordance with condition J.6 of Water License 2AM-DOH1335, an updated estimate of total closure restoration liability must be provided the Nunavut Water Board, within twelve months of the mine entering care and maintenance. The purpose of this document is to support an estimate of the total closure liability for the Doris, Madrid and Roberts Bay areas.

1.1 Scope

The scope of this document is to outline the current state of mine facilities associated with the Doris-Madrid project, and how they differ from the life of mine (LOM) facility descriptions outlined in the water board approved Hope Bay Project Doris-Madrid Interim Closure and Reclamation Plan (SRK 2017). The current state of mine facilities presented is representative of December 2022, however, for some facilities (i.e., TIA interim dyke) ongoing work is in progress, and the completed design is used for the current state of the facility.

Additionally, this document will provide updated closure and reclamation requirements for facilities where the closure and reclamation requirements outlined in the Hope Bay Project Doris-Madrid Interim Closure and Reclamation Plan (SRK 2017), need to be adjusted to account apply to the current conditions.

This information will be provided to support cost estimates performed by others.

This scope does not include quantities estimation or closure and reclamation requirements for facilities at Patch Lake, the Old windy Camp or Boston.

1.2 Organization

In SRK (2017) each facility was assigned a work breakdown structure (WBS) code; to allow for easy referencing of the various facilities. For ease of reference with the approved interim closure and reclamation plan these WBS codes have been carried forward, and new codes added as required.

Section 2 provides a description of current mine facilities compared to LOM, and Section 3 describes the closure and reclamation requirements.

Key supporting information includes:

- Figures which show the existing infrastructure on-site and the WBS associated with each.
- A complete listing of facilities, and their status (constructed, not developed etc.) is provided in Appendix A.

2 Description of Mine Facilities

2.1 Underground Mine Workings

The extent of underground workings developed to-date are much smaller than in the life of mine (LOM) closure plan. Doris development has been the most extensive, while Madrid North development has consisted of an approximately 4 km decline and Madrid South has not been developed.

In addition to the underground workings two crown pillar recovery trenches (CPRT) were developed, as can be seen on Figure 06 and 09.

The key differences between the life of mine state of the underground workings and the current state of the underground workings, as relevant to closure planning are described in Table 1.

Table 1: Summary of the State of Underground Mine Workings Prior to Closure for LOM and Current Conditions

Item	LOM	Current
Doris Mine Workings	Backfilled with rockfill, waste rock and tailings	Partially backfilled with tailings and waste rock, 850,000 m ³ of workings remain open.
Madrid North Mine Workings	Backfilled with rockfill, waste rock and tailings	4 km decline constructed. Not backfilled.
Madrid South Mine Workings	Backfilled with rockfill, waste rock and tailings	Not developed
Doris CPRT	Backfilled with waste rock, connected to underground workings	Backfilled. Connected to underground mine workings.
Naartok East CPRT	Backfilled with waste rock, connected to underground workings	Partially backfilled, partially flooded. Not connected to underground.
Madrid CPRT	Backfilled with waste rock, connected to underground workings	Not developed
Mine backfill to be quarried	1.8 Mt	0.99 Mt

Sources: TMAC 2020, Personal Communication January 24, 2023 Nancy Harvey (AEM), Personal Communication January 23, 2023 Patrick Baker (AEM)

2.2 Waste Rock Dumps, Ores Stockpiles, and Overburden Piles

For current conditions waste rock dumps (WRD) and ore piles remain on surface at Doris and Madrid and some permitted facilities were not constructed. The current status of these facilities is summarized in Table 2.

Overburden stockpiles at Roberts Bay [RB-007], Quarry #2 [Q2-002], and Quarry D [DW-009] have been constructed and are generally as described in SRK (2017). Additional overburden was placed in the Quarry #2 overburden stockpile during construction of the Doris CPRT. A new overburden stockpile

was constructed at Madrid North [MN-028], and it consists of overburden material excavated from the Naartok CPRT.

Table 2: Summary of the State of WRD, and Overburden Piles Prior to Closure for LOM and Current Conditions

Item	LOM	Current
Doris Expanded WRD [DM-025]	Waste rock placed underground, only rockfill pad and contact water ponds remain	Waste rock on surface. The Waste rock pile is over steepened and high. Additionally, Madrid ore is stockpiled on this pad.
Doris Pad U WRD [DM-035]	Waste rock placed underground, only rockfill pad and contact water ponds remain	Not developed
Madrid North WRD [MN-001]	Waste rock placed underground, only rockfill pad and contact water ponds remain	Waste rock on surface.
Madrid South WRD [MS-001]	Waste rock placed underground, only rockfill pad and contact water ponds remain	Not developed
Doris Ore Stockpile [DM-010]	Rockfill pad and contact water ponds remain	Ore on surface
Madrid North Ore Stockpile [MN-002]	Rockfill pad and contact water pond(s)	Rockfill pad (Ore Transfer Pad) partially reclaimed, no contact water pond developed
Madrid South Ore Stockpile [MS-002]	Rockfill pad and contact water ponds remain	Not developed

Sources: TMAC 2020, AEM 2021

2.3 Tailings Impoundment Area

The key differences in the current TIA conditions are summarized in Table 3. Construction of the Interim Dyke is currently underway. For the purpose of this comparison, it is assumed that the interim dyke construction has been completed.

Table 3: Summary of the State of TIA Prior to Closure for LOM and Current Conditions

Item	LOM	Current
Sub Aerial Tailings [TIA-001]	170 Ha	23.9 Ha
South Dam [TIA-002]	Final Dam	Starter Dam
North Dam [TIA-003]	Final Dam	Final Dam
West Dam [TIA-004]	Final Dam	Not Constructed
Shoreline disturbance, requiring erosion protection	Small area of natural ground exposed that had previously been flooded	Large area of natural ground between maximum TIA water level and post-closure pond elevation
Interim Dyke [TIA-006]	Constructed	Construction in progress ¹
Sub Aqueous Tailings [TIA-007]	Not Present	Extent unknown
Remaining Pond	Small (approximately 26,000 m ³)	Large (estimated to be 1,585,000 m ³)

Sources: 2021 Tailings Bathymetric Survey

Notes:

¹ It is assumed that construction of this dyke will be completed in Q1 of 2023.

2.4 Buildings and Equipment

The status of buildings and equipment is outlined in Appendix A. The primary changes to the proposed infrastructure (SRK 2017) are that the New Windy Camp, wind power generators and Madrid South were not constructed, and less buildings and equipment than planned were developed at Madrid.

A new water treatment plant, not previously included in the LOM plan, was constructed near the North Dam in 2022 [SR-005].

2.5 Mine Infrastructure

The status of mine infrastructure is outlined in Appendix A. The amount of infrastructure developed is significantly less than in the LOM plan outlined in SRK 2017 as the following were not constructed:

- Roberts Bay cargo dock and jetty
- Roberts Bay laydown expansion
- Madrid-Boston all-weather road including quarries and water crossings (bridges and culverts)
- Madrid South all-weather road including water crossings
- Madrid North-TIA all-weather road including quarry and water crossings
- Phase 2 TIA Secondary Road

2.6 Quarry #3 Landfills

Quarry #3 has not yet been developed, and explosives magazines are stored where the quarry access road connects to the Secondary Road. It is assumed that this quarry will be developed during closure activities.

A non-hazardous waste landfill has been permitted and constructed in Quarry #2.

2.7 Water Management Systems

The planned water management system infrastructure that exists on site consists of:

- Doris Fresh Water Pipelines
- Doris Run-off Diversion Berm
- Doris Sedimentation Berm
- Doris Sedimentation/Pollution Control Pond
- Doris Sewage Discharge Line
- Doris Sumps
- Doris Water Intake Structure and Pumping Facility
- Madrid North Contact Water Pond Berm
- Madrid North Diversion Berm
- Madrid North Sumps
- Roberts Bay Discharge System
- Quarry #2 Treated Sewage Discharge Areas
- Tailings and Reclaim Water Pipelines

The following planned water management infrastructure was not developed:

- Doris Pad U Sedimentation/Pollution Control Pond
- Madrid South Primary Contact Water Pond Berm
- Madrid South Haul Road / Secondary Contact Water Pond Berm
- Madrid North Reclaim Pipeline
- Madrid South Groundwater Pipeline

The status of mine infrastructure is outlined in Appendix A.

3 Permanent Closure and Reclamation Requirements

3.1 Underground Mine Workings

Reclamation and Closure requirements remain as outlined in SRK (2017) Section 4.5.1 with the following exceptions:

- Backfilling of the underground mine workings at Doris and Madrid has not been completed, and will need to be completed as part of closure activities. The backfill may consist of waste rock, detoxified leach tailings, ore or quarry rock, provided the backfill meets the stability requirements of the mining engineers and applicable management plans.
- Given that the underground mine workings have only been partially developed, the mine flooding times provided in SRK (2017) are not correct. New estimates of the time to flood have not been developed.
- The Naartok CPRT should be drained of all water then backfilled with waste rock, ROQ and/or frozen overburden over one winter season. Backfilling during one winter season and removing all water before backfill placement is required for optimal freezeback of the backfill. The backfilled pit will be capped with a thermal cover, and a surface water diversion will be constructed to divert surface water from the backfilled pit. The thermal cover and diversion berm should be constructed of ROQ.
 - If overburden is used it must remain frozen, as the overburden porewater is likely saline water.

3.2 Waste Rock Dumps, Ore stockpiles, and Overburden Piles

Reclamation and Closure requirements remain as outlined in SRK (2017) Section 4.5.2 with the following exceptions:

- Given that backfilling of mine workings has not been completed, ore remaining on surface shall be hauled underground to be used as backfill.
- Waste rock remaining on surface may be:
 - Used as backfill for mine workings (underground and CPRT)
 - Used as TIA cover material. Provided confirmatory geochemical testing confirms suitability. It is highly likely that Doris waste rock is suitable; Madrid North waste rock is also likely suitable but there is less certainty.
 - Regraded and left in place Provided confirmatory geochemical testing confirms suitability, and approval from regulatory bodies is obtained.

3.3 Tailings Containment Area

Reclamation and Closure requirements for the TIA are generally as outlined in SRK (2017) Section 4.5.3. However, the significantly smaller quantity of tailings deposited in the TIA to-date will result in a larger pond at the toe of the tailings deposit post-breach of the north dam.

Given that the residual pond at the base of the tailings is expected to be in the order of 1.6 Mm³, the option to leave a pond in place rather than fill this residual pond with quarried rock as outlined in SRK (2017) Section 4.5.3 should be considered. Leaving a pond in place would likely require regulatory approval. If a pond were to be left in place the tailings below the residual pond surface would be covered with ROQ.

Early closure of the TIA means the area of natural ground with vegetation die back, due to being submerged for an extended period of time, is significantly larger than expected at LOM closure. Shoreline protection is required in this area to prevent erosion of the area due to thermal degradation of the permafrost. For the purpose of the quantity estimate the elevation of 32.5 masl was selected as the most reasonable estimate for the top of the shoreline protection area, as this elevation is the highest elevation the TIA pond has reached for an extended period of time (more than 4 months). However, it is possible that shoreline protection may be required to the highest measured water elevation in the TIA 32.7 masl (measured October 2022).

Additional reclamation and closure requirements include:

- Remove Aqua Dam:
 - Discharge stored water
 - Dispose of Aqua Dam in the on-site landfill
- Breach the interim dike:
 - The interim dike will be breached to allow for free drainage.
 - The internal geosynthetic clay liner (GCL) from the dike will be disposed of in the on-site landfill.

3.4 Buildings and Equipment

Reclamation and closure requirements remain as outlined in SRK (2017) Section 4.5.4. While there have been some changes to the number of buildings and equipment the closure and reclamation requirements remain unchanged, other than the location of the landfill as discussed in Section 3.6.

3.5 Mine Infrastructure

Reclamation and Closure requirements remain as outlined in SRK (2017) Section 4.5.5.

3.6 Quarry #3 Landfill

Assuming Quarry #3 is developed during closure activities to produce the materials required for TIA reclamation, the reclamation and closure requirements for the Quarry #3 Landfill remain as outlined in SRK (2017) Section 4.5.6.

However, a constructed and permitted quarry currently exists in Quarry #2, therefore this location could be used as the non-hazardous waste landfill. The reclamation and closure requirements for the Quarry #2 landfill would be similar to those outlined in SRK (2017) Section 4.5.6.

3.7 Water Management Systems

Reclamation and Closure requirements remain as outlined in SRK (2017) Section 4.5.7.

Closure

This report, Doris-Madrid Interim Closure and Reclamation Plan Comparison, was prepared by

DRAFT

Megan Miller, PEng
Principal Consultant

and reviewed by

DRAFT

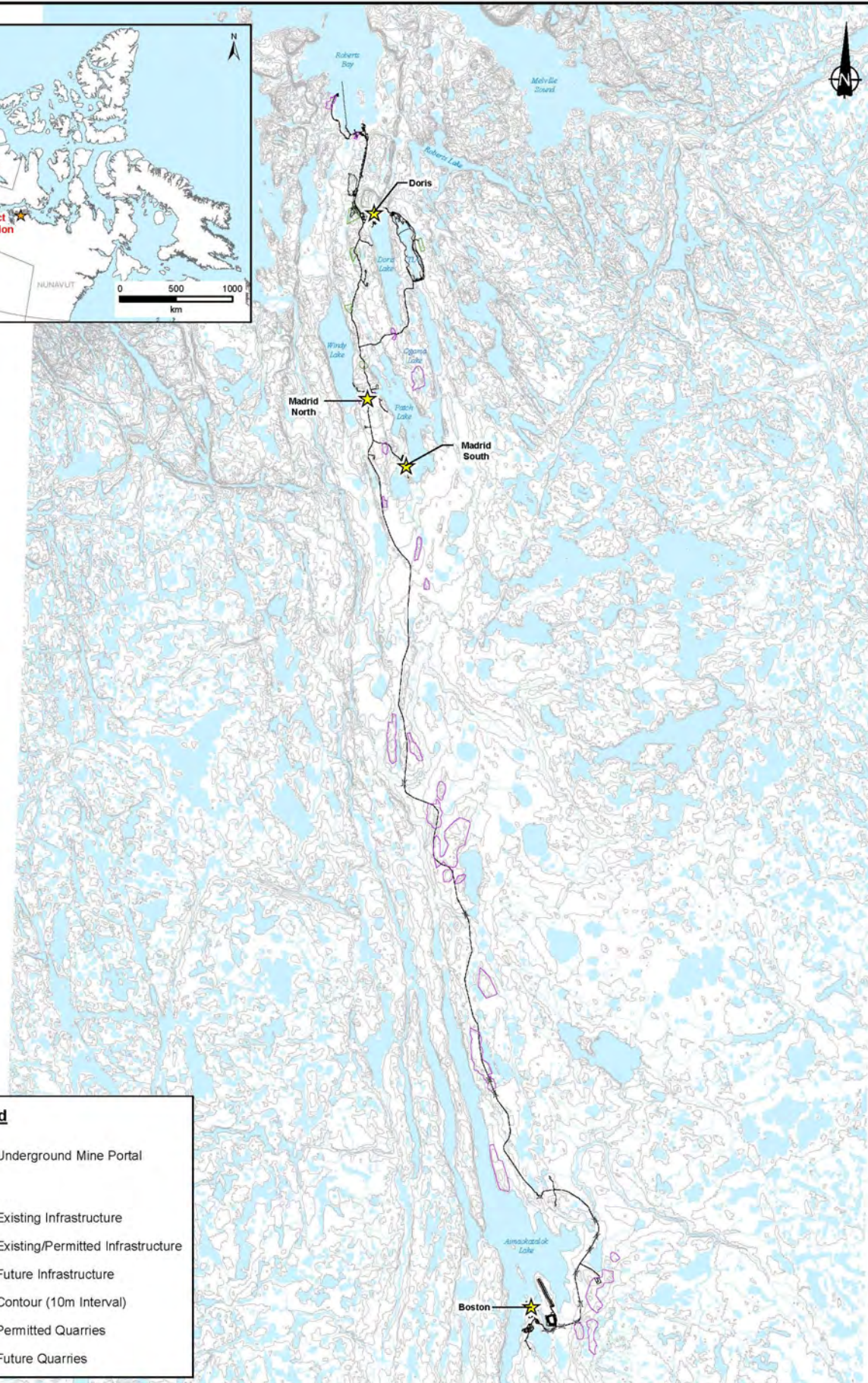
Peter Luedke, PEng
Senior Consultant

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

References

- Agnico Eagle Mines Limited. 2022. Hope Bay Project 2021 Nunavut Impact Review Board Annual Report. Prepared for: Nunavut Impact Review Board. April.
https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=339231&applicationid=124148&sessionid=mafuls484qlgcrifirq73af8v6
- Agnico Eagle Mines Limited. 2021. Hope Bay Project 2020 Nunavut Impact Review Board Annual Report. Prepared for: Nunavut Impact Review Board. April
https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=335083&applicationid=124148&sessionid=mafuls484qlgcrifirq73af8v6
- Nunavut Water Board. 2018. Amended Water License 2AM-DOH1335 Type 'A' - Amendment No. 2. Issued: August 16, 2013, Amended: November 4, 2016, December 7, 2018). November 7
- SRK Consulting (Canada) Inc. 2017. Hope Bay Project Doris-Madrid Interim Closure and Reclamation Plan. Prepared for TMAC Resources Inc. Project No.: 1CT022.013. November.
- TMAC Resources Inc. December 2017. Madrid-Boston Project. Final Environmental Impact Statement.
https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=314934&applicationid=124148&sessionid=9oit5ml1603ne310fmbtp6qss2
- TMAC Resources Inc. 2020. Hope Bay Project 2019 Nunavut Impact review Board Annual Report. Prepared for: Nunavut Impact Review Board. April
https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=329782&applicationid=124148&sessionid=mafuls484qlgcrifirq73af8v6
- TMAC Resources Inc. 2019. Hope Bay Project 2018 Nunavut Impact review Board Annual Report. Prepared for: Nunavut Impact Review Board. April
https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=329782&applicationid=124148&sessionid=mafuls484qlgcrifirq73af8v6

Figures



Legend

- Underground Mine Portal
- Existing Infrastructure
- Existing/Permitted Infrastructure
- Future Infrastructure
- Contour (10m Interval)
- Permitted Quarries
- Future Quarries



Notes:
 1. Coordinate System: NAD 1983 UTM Zone 13N
 2. Base Topo Data: CanVec, Natural Resources Canada



Project No: CAPR002182
 Filename: 1C1022.004.200.10_Fig_1_ClosureReclamationSite_mzs_sst.mxd

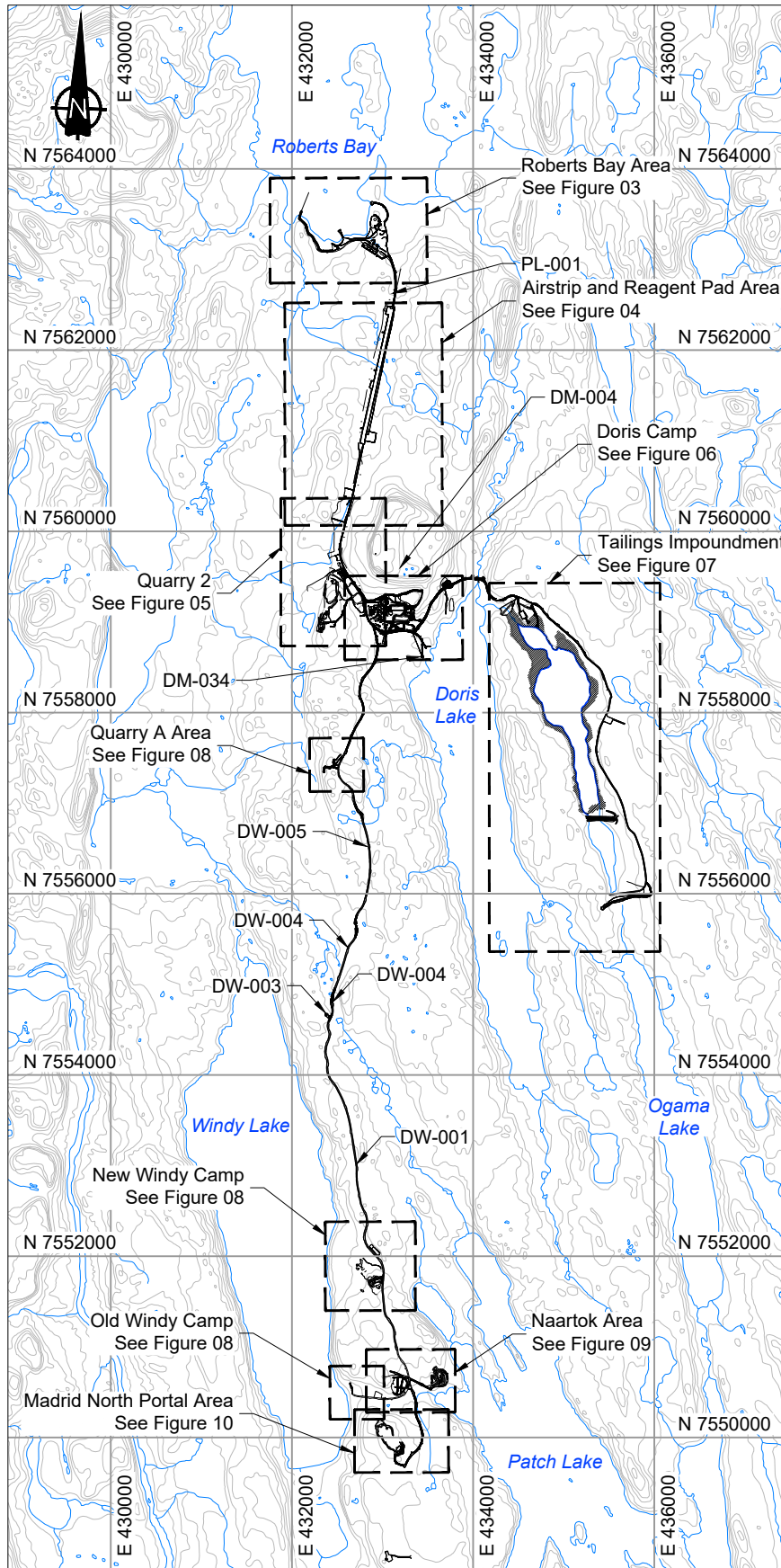


Hope Bay

Closure Planning Figures

Site Location Map

Date: 2023/02/16	Approved: MMM	Figure 1
---------------------	------------------	-------------



LEGEND

Existing Infrastructure

Waterbodies

NOTES

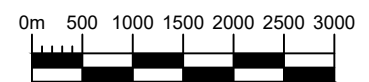
1. All units are in meters unless otherwise specified.
2. Contours are shown at 20.0 m intervals.
3. New Windy Camp was not constructed, name maintained for consistency with permitted closure plan.

REFERENCES

NAD83 UTM Zone 13.

Base Topo Data: CanVec, Natural Resources Canada

Work Area	Facility	WBS Code
Doris Windy Road	All-Weather Road	DW-001
	Quarry B	DW-003
	Clear-span Crossings	DW-004
	Arched Culvert Crossing	DW-005
Pipeline	Roberts Bay Discharge System	PL-001
Doris	Communications Tower	DM-004
	Vent Raise	DM-034



Hope Bay

Closure Planning Figures

General Arrangement Work
Breakdown Structure

SRK JOB NO.: CAPR002182

FILE NAME: CAPR002182 - GA - Work Breakdown Structure.dwg

DATE:
Feb 3, 2023

APPROVED:
MMM

FIGURE:

02

C:\Users\madon\SRK Consulting\F52018 Hope Bay (Doris North, Boston, Madrid) - IACAD\ACAD_C3D\CAPR002182_2022 Closure Planning Support\Closure Planning Figures\CAPR002182 - GA - Work Breakdown Structure.dwg



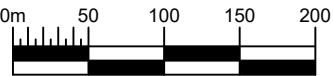
LEGEND	
	Area Boundary
	Existing Infrastructure
	Existing Pipelines
	Waterbodies

- NOTES**
1. All units are in meters unless otherwise specified.
 2. Contours are shown at 2.0 m intervals.
 3. Marine outfall pipeline location in Roberts Bay is approximate.

REFERENCES

NAD83 UTM Zone 13.
Imagery from ArcGIS World Imagery (Maxar Vivid). Captured on July 16, 2021 and July 16, 2022. Retrieved from Global Mapper.

Work Area	Facility	WBS Code
Roberts Bay	Jetty	RB-001
	20ML Tank Farm	RB-002
	Quarry 1-5ML Tank Farm	RB-003
	Mechanical Shop Complex	RB-004
	Waste Management Facility	RB-005
	Laydown Area	RB-006
	Overburden Pile	RB-007
	Fuel Transfer Access Road	RB-008
	Communications Tower	RB-009
	Developed Areas (for regrading)	RB-011
	Roberts Bay Discharge System	PL-001
Pipelines	Culvert Crossings	MOF-003
Marine Outfall	Berm	MOF-001
	Road	MOF-002
Doris North	Primary Road	DM-031



SRK JOB NO.: CAPR002182

FILE NAME: CAPR002182 - GA - Work Breakdown Structure.dwg

Hope Bay

Closure Planning Figures

Roberts Bay Area Work Breakdown Structure

DATE: Feb 3, 2023

APPROVED: MMM

FIGURE: 03

C:\Users\madon\SRK Consulting\F52018 Hope Bay (Doris North, Boston, Madrid) - IACAD\ACAD_C3D\CAPR002182_2022 Closure Planning Support\Closure Planning Figures\CAPR002182 - GA - Work Breakdown Structure.dwg



C:\Users\madon\SRK Consulting\F52018 Hope Bay (Doris North, Boston, Madrid) - IACAD\ACAD_C3D\CAPR002182_2022 Closure Planning Support\Closure Planning Figures\CAPR002182 - GA - Work Breakdown Structure.dwg



LEGEND

- Area Boundary
- Existing Infrastructure
- Existing Pipelines
- Waterbodies

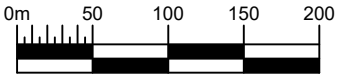
NOTES

- All units are in meters unless otherwise specified.
- Contours are shown at 2.0 m intervals.

REFERENCES

NAD83 UTM Zone 13.
Imagery from ArcGIS World Imagery (Maxar Vivid). Captured on July 16, 2021 and July 16, 2022. Retrieved from Global Mapper.

Work Area	Facility	WBS Code
Waste Management Area	Land Farm	WM-001
	Batch Plant Pad	WM-002
	Burn Pan	WM-003
	Core Storage Area	WM-004
Quarry #2 Area	Quarry	Q2-001
	Overburden Dump	Q2-002
	Treated Sewage Discharge Areas	Q2-003
	Laydown	Q2-004
	Sedimentation Berm	DM-014
Pipelines	Roberts Bay Discharge System	PL-001
	Sewage Discharge Line	DM-016



SRK JOB NO.:
CAPR002182

FILE NAME:
CAPR002182 - GA - Work Breakdown Structure.dwg

Hope Bay

Closure Planning Figures

Quarry 2 Area Work Breakdown Structure

DATE:
Feb 3, 2023

APPROVED:
MMM

FIGURE:
05

C:\Users\madon\SRK Consulting\F52018 Hope Bay (Doris North, Boston, Madrid) - IACAD\ACAD_C3D\CAPR002182_2022 Closure Planning Support\Closure Planning Figures\CAPR002182 - GA - Work Breakdown Structure.dwg



LEGEND

- Area Boundary
- Existing Infrastructure
- Existing Pipelines
- Waterbodies

NOTES

- All units are in meters unless otherwise specified.
- Contours are shown at 2.0 m intervals.

REFERENCES

NAD83 UTM Zone 13.
Imagery from ArcGIS World Imagery (Maxar Vivid). Captured on July 16, 2021 and July 16, 2022. Retrieved from Global Mapper.



SRK JOB NO.: CAPR002182

FILE NAME: CAPR002182 - GA - Work Breakdown Structure.dwg



Hope Bay

Closure Planning Figures

Doris Camp Area Work Breakdown Structure

DATE:
Feb 3, 2023

APPROVED:
MMM

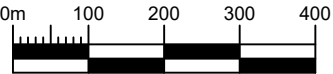
FIGURE:

06

C:\Users\madon\SRK Consulting\5208 Hope Bay (Doris North, Boston, Madrid) - IACAD\ACAD_C3D\CAPR002182_2022 Closure Planning Support\Closure Planning Figures\CAPR002182 - GA - Work Breakdown Structure.dwg



Work Area	Facility	WBS Code
Tailings Impoundment Area	Sub-aerial Tailings	TIA-001
	South Dam	TIA-002
	North Dam	TIA-003
	Shoreline Protection	TIA-005
	Interim Dyke	TIA-006
	Sub Aqueous Tailings	TIA-007
Quarry #3	Quarry #3	Q3-001
	Quarry #3 Access Road	Q3-002
	Quarry #3 landfill (See Note 3)	Q3-003
Secondary Road Area	Secondary Road	SR-001
	Tailings and Reclaim Water Pipelines	SR-002
	Tail Lake Access Road (Chainage 0.725 of Secondary Rd) and Reclaim Jetty	SR-003
	Explosives Facility	SR-004
	Water Treatment Plant	SR-005



LEGEND

Area Boundary

Existing Infrastructure

NOTES

1.

All units are in meters unless otherwise specified.

2.

Contours are shown at 2.0 m intervals.

3.

Landfill may be developed during closure activities.

4.

Sub-aqueous tailings extent is assumed, as difficult to determine from bathymetry data.

REFERENCES

NAD83 UTM Zone 13.

Imagery from ArcGIS World Imagery (Maxar Vivid). Captured on July 16, 2021 and July 16, 2022. Retrieved from Global Mapper.

TIA Bathymetry 2021 (Bathy - Doris TIA 2021.zip)

Sub-aerial Tailings 2021 (C15784_South Beach UTM13_min_Sub sampling 10cm.las)

srk consulting

SRK JOB NO.: CAPR002182

FILE NAME: CAPR002182 - GA - Work Breakdown Structure.dwg

AGNICO EAGLE

Hope Bay

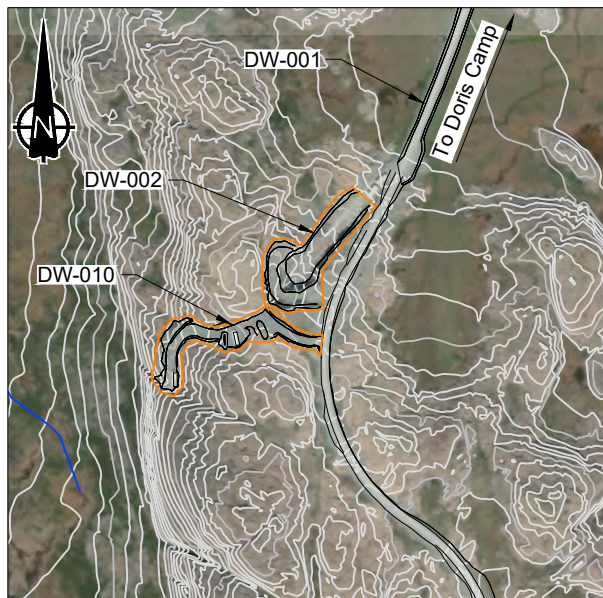
Closure Planning Figures

TIA Area Work Breakdown Structure

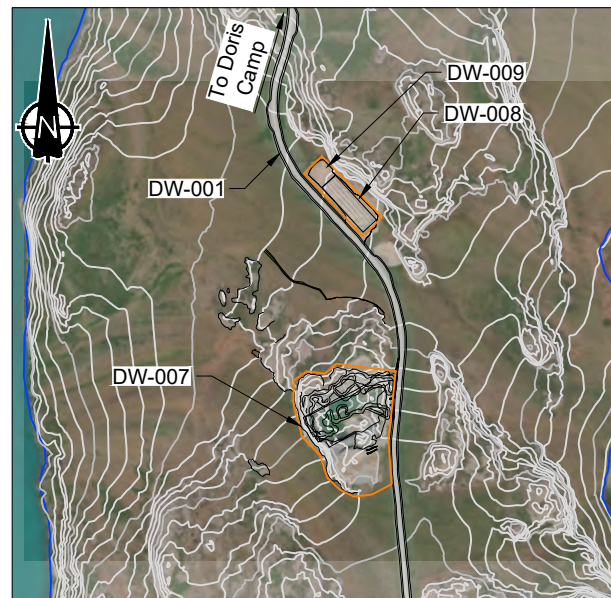
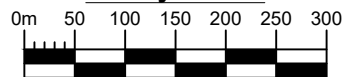
DATE: Feb 3, 2023

APPROVED: MMM

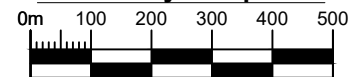
FIGURE: 07



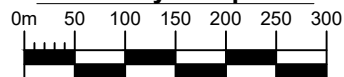
Quarry A Area



New Windy Camp Area



Old Windy Camp Area



Work Area	Facility	WBS Code
Doris Windy Road	All-Weather Road	DW-001
	Quarry A	DW-002
	Explosive Facility	DW-010
New Windy Camp Area	Quarry D	DW-007
	Core Storage Area	DW-008
	Oversized Dump	DW-009
	Diversion Berm	WC-013

LEGEND

- Area Boundary
- Existing Infrastructure
- Existing Pipelines
- Waterbodies

NOTES

1. All units are in meters unless otherwise specified.
2. Contours are shown at 2.0 m intervals.
3. New Windy Camp was not constructed, name maintained for consistency with permitted closure plan.

REFERENCES

NAD83 UTM Zone 13.
Imagery from ArcGIS World Imagery (Maxar Vivid). Captured on July 16, 2021 and July 16, 2022. Retrieved from Global Mapper.



Hope Bay

Closure Planning Figures

Quarry A and Windy Camp Area Work Breakdown Structure

SRK JOB NO.: CAPR002182
FILE NAME: CAPR002182 - GA - Work Breakdown Structure.dwg

DATE: Feb 3, 2023
APPROVED: MMM
FIGURE: 08

C:\Users\madon\SRK Consulting\F52018 Hope Bay (Doris North, Boston, Madrid) - IACAD\ACAD_C3D\CAPR002182_2022 Closure Planning Support\Closure Planning Figures\CAPR002182 - GA - Work Breakdown Structure.dwg



LEGEND

Area Boundary

Existing Infrastructure

Existing Pipelines

Waterbodies

NOTES

1.

All units are in meters unless otherwise specified.

2.

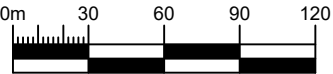
Contours are shown at 2.0 m intervals.

REFERENCES

NAD83 UTM Zone 13.

Imagery from ArcGIS World Imagery (Maxar Vivid). Captured on July 16, 2021 and July 16, 2022. Retrieved from Global Mapper.

Work Area	Facility	WBS Code
Madrid North	Naartok CPRT	MN-026
	Naartok CPRT Access Road	MN-027
	Madrid Overburden Stockpile	MN-028
	Nuna Shop Area	MN-029
Windy Camp	Drilling Cuttings	WC-014



srk consulting

SRK JOB NO.:
CAPR002182

FILE NAME:
CAPR002182 - GA - Work Breakdown Structure.dwg

AGNICO EAGLE

Hope Bay

Closure Planning Figures

Naartok Area Work Breakdown Structure

DATE:
Feb 3, 2023

APPROVED:
MMM

FIGURE:
09

C:\Users\madon\SRK Consulting\F52018 Hope Bay (Doris North, Boston, Madrid) - IACAD\ACAD_C3D\CAPR002182_2022 Closure Planning Support\Closure Planning Figures\CAPR002182 - GA - Work Breakdown Structure.dwg



LEGEND

Area Boundary

Existing Infrastructure

Existing Pipelines

- NOTES
1.

All units are in meters unless otherwise specified.
2.

Contours are shown at 2.0 m intervals.
3.

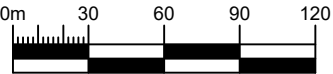
Material in bubble dumps likely brine material removed from Madrid North Portal Pad, and should not be used for construction.
4.

No ore remains at Madrid North, some Madrid ore is stockpiled on the Doris Camp waste rock pad (DM-025).

REFERENCES

NAD83 UTM Zone 13.
Imagery from ArcGIS World Imagery (Maxar Vivid). Captured on July 16, 2021 and July 16, 2022. Retrieved from Global Mapper.

Work Area	Facility	WBS Code
Madrid North	Waste Rock Pile	MN-001
	Contact Water Pond	MN-003
	Portal Pad	MN-006
	Portal and Underground Works	MN-012
	Calcium Chloride Laydown	MN-014
	Developed Areas (for regrading)	MN-016
	Diversion Berm	MN-022
	Sumps	MN-023



srk consulting

SRK JOB NO.: CAPR002182

FILE NAME: CAPR002182 - GA - Work Breakdown Structure.dwg

AGNICO EAGLE

Hope Bay

Closure Planning Figures

Madrid North Portal Area Work Breakdown Structure

DATE: Feb 3, 2023

APPROVED: MMM

FIGURE: 10

Appendix A Complete Listing of Facilities

Facility Name	Area	WBS Code	Status	
All-Weather Road	Cargo Dock Access Road	CDR_001	Not Developed	
Culverts	Cargo Dock Access Road	CDR_002	Not Developed	
Bridge Crossing	Cargo Dock Access Road	CDR_003	Not Developed	
Fuel Transfer Pipeline	Cargo Dock Access Road	CDR_004	Not Developed	
Waste Rock Pile	Doris Phase 1	DC_001	Old code, superceeded by DM_025	
Expanded Waste Rock Storage (Pad T)	Doris Phase 2	DC_002	Old code, superceeded by DM_025	
Accommodation Complex	Doris	DM_001	2 Dorms added in 2019 and one dorm added 2019.	TMAC 2019 and 2020
Backup Power generator	Doris	DM_002		
Communications Tower	Doris	DM_004		
Fire Water Storage Tank	Doris	DM_005		
Fresh Water Pipelines	Doris	DM_006		
Helicopter Support Facilities	Doris	DM_007		
Muster Station	Doris	DM_008		
Offices & Mine Dry Complex	Doris	DM_009		
Ore Pile	Doris	DM_010		
Permanent Power Generator	Doris	DM_011		
Portal and Underground Works	Doris	DM_012		
Run-off Diversion Berm	Doris	DM_013		
Sedimentation Berm	Doris	DM_014		
Sedimentation/Pollution Control	Doris	DM_015		
Sewage Discharge Line	Doris	DM_016		
Sewage Treatment Plant	Doris	DM_017		
Sumps	Doris	DM_018		
Swick Shop	Doris	DM_019		
Tank Farm	Doris	DM_020		
Process Plant	Doris	DM_021		
Underground Support Mechanical Shop	Doris	DM_022		
Underground Wash Bay	Doris	DM_023		
Warehouse / Core Shack	Doris	DM_024		
Waste Rock Pile	Doris	DM_025		
Water Intake Structure and Pumping Facility	Doris	DM_026		
Airstrip	Doris	DM_027		
Airstrip Aprons	Doris	DM_028		
Airstrip Lighting	Doris	DM_029		
Primary Vent Raise	Doris	DM_030		
Primary Road	Doris	DM_031		
Developed Areas (for regrading)	Doris	DM_032		
Connector Vent Raise	Doris	DM_033	Constructed 2018/2019	TMAC 2020
Central Vent Raise	Doris	DM_034	Not Developed	
Pad U Sedimentation/Pollution Control Pond	Doris	DM_035	Not Developed	
Doris CPRT	Doris	DM_036	Backfill and reclamation completed in 2019.	TMAC 2020
Doris CPRT Access Road	Doris	DM_037	Developed 2019.	TMAC 2020
All weather road	Doris-Windy All Weather Road	DW_001		
Quarry A	Doris-Windy All Weather Road	DW_002		
Quarry B	Doris-Windy All Weather Road	DW_003		
Clear-span crossings	Doris-Windy All Weather Road	DW_004		
Arched Culvert Crossing	Doris-Windy All Weather Road	DW_005		
Quarry D	Doris-Windy All Weather Road	DW_007		
Core Storage Area	Doris-Windy All Weather Road	DW_008		
Quarry D Overburden Pile	Doris-Windy All Weather Road	DW_009		
Explosives Storage Facility	Doris-Windy All Weather Road	DW_010		
Turbine Pad #1	Doris-Windy All Weather Road	DW_011	Not Developed	
Turbine Pad #2	Doris-Windy All Weather Road	DW_012	Not Developed	
All-Weather Road	Madrid-Boston All Weather Road	MBR_001	Not Developed	
Quarry G	Madrid-Boston All Weather Road	MBR_002	Not Developed	
Quarry H	Madrid-Boston All Weather Road	MBR_003	Not Developed	
Quarry J	Madrid-Boston All Weather Road	MBR_004	Not Developed	
Quarry L	Madrid-Boston All Weather Road	MBR_005	Not Developed	
Quarry M	Madrid-Boston All Weather Road	MBR_006	Not Developed	
Quarry N	Madrid-Boston All Weather Road	MBR_007	Not Developed	
Quarry O	Madrid-Boston All Weather Road	MBR_008	Not Developed	
Quarry P	Madrid-Boston All Weather Road	MBR_009	Not Developed	
Quarry Q	Madrid-Boston All Weather Road	MBR_010	Not Developed	
Quarry R	Madrid-Boston All Weather Road	MBR_011	Not Developed	
Quarry S	Madrid-Boston All Weather Road	MBR_012	Not Developed	
Quarry T	Madrid-Boston All Weather Road	MBR_013	Not Developed	
Quarry U	Madrid-Boston All Weather Road	MBR_014	Not Developed	
Quarry V	Madrid-Boston All Weather Road	MBR_015	Not Developed	
Quarry W	Madrid-Boston All Weather Road	MBR_016	Not Developed	
Quarry X	Madrid-Boston All Weather Road	MBR_017	Not Developed	
Quarry Z	Madrid-Boston All Weather Road	MBR_018	Not Developed	
Quarry AA	Madrid-Boston All Weather Road	MBR_019	Not Developed	
Quarry AB	Madrid-Boston All Weather Road	MBR_020	Not Developed	
Quarry AD	Madrid-Boston All Weather Road	MBR_021	Not Developed	
Crossing C-MBR-7	Madrid-Boston All Weather Road	MBR_022	Not Developed	
Crossing C-MBR-8	Madrid-Boston All Weather Road	MBR_023	Not Developed	
Crossing C-MBR-9	Madrid-Boston All Weather Road	MBR_024	Not Developed	
Crossing C-MBR-10	Madrid-Boston All Weather Road	MBR_025	Not Developed	

Facility Name	Area	WBS Code	Status	
Crossing C-MBR-11	Madrid-Boston All Weather Road	MBR_026	Not Developed	
Crossing C-MBR-12	Madrid-Boston All Weather Road	MBR_027	Not Developed	
Crossing C-MBR-13	Madrid-Boston All Weather Road	MBR_028	Not Developed	
Crossing C-MBR-14	Madrid-Boston All Weather Road	MBR_029	Not Developed	
Crossing C-MBR-15	Madrid-Boston All Weather Road	MBR_030	Not Developed	
Crossing C-MBR-16	Madrid-Boston All Weather Road	MBR_031	Not Developed	
Crossing C-MBR-17	Madrid-Boston All Weather Road	MBR_032	Not Developed	
Crossing C-MBR-18	Madrid-Boston All Weather Road	MBR_033	Not Developed	
Crossing C-MBR-19	Madrid-Boston All Weather Road	MBR_034	Not Developed	
Crossing C-MBR-20	Madrid-Boston All Weather Road	MBR_035	Not Developed	
Crusher	Madrid-Boston All Weather Road	MBR_036	Not Developed	
Quarry AJ	Madrid-Boston All Weather Road	MBR_037	Not Developed	
Turbine Pad #3	Madrid-Boston All Weather Road	MBR_038	Not Developed	
Turbine Pad #4	Madrid-Boston All Weather Road	MBR_039	Not Developed	
Turbine Pad #5	Madrid-Boston All Weather Road	MBR_040	Not Developed	
Turbine Pad #6	Madrid-Boston All Weather Road	MBR_041	Not Developed	
Waste Rock Pile	Madrid North	MN_001	Development started 2019.	TMAC 2020
Ore Stockpile	Madrid North	MN_002	Developed 2019, remediated 2021, including removal of lined containment area	
Contact Water Pond Berm	Madrid North	MN_003	Developed 2019. Location changed from FEIS.	TMAC 2020
Emergency Shelter	Madrid North	MN_004	Not Developed	
Office Trailer	Madrid North	MN_005	Developed 2019. Location changed from FEIS.	TMAC 2020
Portal Pad	Madrid North	MN_006	Developed 2019. Location changed from FEIS.	TMAC 2020
Mine Equipment Shop	Madrid North	MN_007	Developed 2019, Remediation 2021. Location changed from FEIS.	TMAC 2020
Compressor Building	Madrid North	MN_008	Not Developed	
Diesel Generator	Madrid North	MN_009	Not Developed	
Laydown Area	Madrid North	MN_010	Design/Location Change	
Fuel Storage Facility	Madrid North	MN_011	Not Developed	
Portal and Underground Works	Madrid North	MN_012	Development started 2019. Location changed from FEIS.	TMAC 2020
Water Storage Tank with Containment	Madrid North	MN_013	Not Developed	
Calcium Chloride Laydown	Madrid North	MN_014	Not Developed	
Brine Mixing Facility	Madrid North	MN_015	Not Developed	
Developed Areas (for regrading)	Madrid North	MN_016	Design/Location Change	
Vent Raise Access Road	Madrid North	MN_017	Not Developed	
Vent Raises	Madrid North	MN_018	Not Developed	
Power Plant	Madrid North	MN_019	Not Developed	
Culverts	Madrid North	MN_020		
Concentrator	Madrid North	MN_021	Not Developed	
Diversion Berm	Madrid North	MN_022	Design/Location Change	
Sumps	Madrid North	MN_023	Currently 4. Constructed 2020.	AEM 2021
Fuel Storage Facility Access Road	Madrid North	MN_024	Not Developed	
Fuel Storage Facility Bypass Road	Madrid North	MN_025	Not Developed	
Naartok CPRT	Madrid North	MN_026	Development started 2019.	TMAC 2020
Overburden Stockpile	Madrid North	MN_028	Development started 2019.	TMAC 2020
Nuna Shop	Madrid North	MN_029	New	
Naartok CPRT Access Road	Madrid North	MN-027	New	
All-Weather Road	Madrid North - TIA Road	MNT_001	Not Developed	
Culvert crossings	Madrid North - TIA Road	MNT_002	Not Developed	
Bridge crossing	Madrid North - TIA Road	MNT_003	Not Developed	
Quarry AG	Madrid North - TIA Road	MNT_004	Not Developed	
Waste Rock Pile	Madrid South	MS_001	Not Developed	
Ore Stockpile	Madrid South	MS_002	Not Developed	
Primary Contact Water Pond Berm	Madrid South	MS_003	Not Developed	
Mine Equipment Shop	Madrid South	MS_004	Not Developed	
Emergency Shelter	Madrid South	MS_005	Not Developed	
Office Trailer	Madrid South	MS_006	Not Developed	
Diesel Generator	Madrid South	MS_007	Not Developed	
Compressor Building	Madrid South	MS_008	Not Developed	
Laydown Pad	Madrid South	MS_009	Not Developed	
Infrastructure Access Road	Madrid South	MS_010	Not Developed	
Portal Haul Road	Madrid South	MS_011	Not Developed	
Haul Road / Secondary Contact Water Pond Berm	Madrid South	MS_012	Not Developed	
Vent Raise Pad Access Road	Madrid South	MS_013	Not Developed	
Air Heating Facility	Madrid South	MS_014	Not Developed	
Vent Raises	Madrid South	MS_015	Not Developed	
Madrid South Portal and Underground Works	Madrid South	MS_016	Not Developed	
Fuel Storage Facility	Madrid South	MS_017	Not Developed	
Calcium Chloride Laydown	Madrid South	MS_018	Not Developed	
Brine Mixing Facility	Madrid South	MS_019	Not Developed	
Water Storage Tank with Containment	Madrid South	MS_020	Not Developed	
Developed Areas (for regrading)	Madrid South	MS_021	Not Developed	
All-Weather Road	Madrid South All Weather Road	MSR_001	Not Developed	
Culvert crossings	Madrid South All Weather Road	MSR_002	Not Developed	
Roberts Bay Discharge System	Pipeline	PL_001		
Madrid North Reclaim Pipeline	Pipeline	PL_002	Not Developed	

Facility Name	Area	WBS Code	Status	
Madrid South Groundwater Pipeline	Pipeline	PL_003	Not Developed	
Quarry	Quarry 2	Q2_001		
Overburden Pile	Quarry 2	Q2_002		
Treated Sewage Discharge Areas	Quarry 2	Q2_003		
Laydown Area	Quarry 2	Q2_004	New	
Quarry # 3	Quarry 3	Q3_001	Not Yet Developed	
Access Road	Quarry 3	Q3_002		
Landfill	Quarry 3	Q3_003	Not Developed	
Landfill	Quarry 2	Q2_005	New. Developed	
Jetty	Roberts Bay	RB_001		
20 ML Tank Farm	Roberts Bay	RB_002	Additional tank constructed in 2019. Capacity at 20ML.	TMAC 2020
Quarry 1 - 5 ML Tank Farm	Roberts Bay	RB_003	Berm expanded in 2019. Capacity 5ML.	TMAC 2019
Mechanical Shop Complex	Roberts Bay	RB_004		
Waste Management Facility	Roberts Bay	RB_005		
Laydown Area	Roberts Bay	RB_006	Expansion not constructed.	
Overburden Pile	Roberts Bay	RB_007		
Fuel Transfer Access Road	Roberts Bay	RB_008	Not Developed	
Communications Tower	Roberts Bay	RB_009		
Developed Areas (for regrading)	Roberts Bay	RB_011		
Cargo Dock	Roberts Bay	RB_012	Not Developed	
10ML Fuel Storage Facility	Roberts Bay	RB_013	Not Developed	
10ML Fuel Storage Facility Access Road	Roberts Bay	RB_014	Not Developed	
10ML Fuel Storage Facility Access Road Culvert	Roberts Bay	RB_015	Not Developed	
Equipment Laydown Area	Reagent Pads	RP_001		
Materials Laydown Area	Reagent Pads	RP_002		
Ammonium Nitrate Storage Area	Reagent Pads	RP_003		
Exploration Drilling Support Shop	Reagent Pads	RP_004		
Secondary Road	Secondary Road	SR_001		
Tailings and Reclaim Water Pipelines	Secondary Road	SR_002		
Tail Lake Access Road	Secondary Road	SR_003		
Explosives Facility	Secondary Road	SR_004		
Water Treatment Plant	Secondary Road	SR_005		
Subaerial Tailings Area	TIA	TIA_001	Much smaller footprint	
South Dam	TIA	TIA_002		
North Dam	TIA	TIA_003		
West Dam	TIA	TIA_004	Not Developed	
Shoreline Protection	TIA	TIA_005		
Interim Dyke	TIA	TIA_006	Under construction, assume fully developed	
Subaqueous Tailing	TIA	TIA_007	New	
Tank Farm	Windy	WC_001	Assumed complete. Excluded from this scope.	
Accomodation Camp Buildings	Windy	WC_002	Not Developed	
Winter Road to Patch	Windy	WC_004	Assumed complete. Excluded from this scope.	
Potable Water Supply System	Windy	WC_006	Not Developed	
Waste Incinerator	Windy	WC_007	Not Developed	
Disposal of demolition waste	Windy	WC_008	Assumed complete. Excluded from this scope.	
Hazardous Waste Disposal Cost	Windy	WC_009	Assumed complete. Excluded from this scope.	
Summer Debris Collection	Windy	WC_010	Assumed complete. Excluded from this scope.	
Developed Areas (for regrading)	Windy	WC_011	Assumed complete. Excluded from this scope.	
Reclaim Drill Holes	Windy	WC_012	Assumed complete. Excluded from this scope.	
Diversion Berm	Windy	WC_013	Assumed complete. Excluded from this scope.	
Drilling Cuttings	Windy	WC_014		
Land Farm	Waste Management Area	WM_001		
Batch Plant Pad	Waste Management Area	WM_002		
Burn Pan	Waste Management Area	WM_003		
Core Storage Area	Waste Management Area	WM_004		
Marine Outfall Berm	Marine Outfall	MOF-001		
Access Road	Marine Outfall	MOF-002		
Culvert	Marine Outfall	MOF-003		