



UPPER BEAVER PROJECT

Upper Beaver Gold Project Impact Statement

Section 4: Project Description



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Acronyms and Abbreviations

ABA	Acid-Base Accounting
AEM	Agnico Eagle Mines Limited
AP	Acid Potential
ARD	Acid Rock Drainage
AEX	Advanced Exploration (Program)
BNQ	Bureau de normalisation du Québec
CDA	Canadian Dam Association
CIP	Carbon-in-Pulp
CO ₂	Carbon Dioxide
CPB	Cemented Paste Backfill
EWTP	Effluent Water Treatment Plant
IDF	Inflow Design Flood
MBBR	Moving Bed Biofilm Reactor
MDMER	Metal and Diamond Mining Effluent Regulations
ML	Metal Leaching
Mt	Million tonnes
NP	Neutralization Potential
NPAG	Non-Potentially Acid Generating
NPR	Neutralization Potential Ratio
PAG	Potentially Acid Generating
PEA	Preliminary Economic Assessment
PMF	Probable Maximum Flood
Project	Upper Beaver Gold Project
PWQO	Provincial Water Quality Objectives
ROM	Run-of-Mine
RSC	Revised Statutes of Canada
RSO	Revised Statutes of Ontario
SFE	Shake Flask Extraction
SO ₂	Sulphur Dioxide
TPD	Tonnes per Day
TSS	Total Suspended Solids
TSF	Tailings Storage Facility
WSP	WSP Canada Inc.

4.0 Project Description

4.1 Existing Facilities and Infrastructure

4.1.1 Overview

The Upper Beaver Gold Project (Project) site is situated 19 km east of Kirkland Lake along Highway 66 (Figure 4.1-1), and has a long mineral exploration and development history. Gold was discovered west of Beaverhouse Lake in 1912. Since that time, there have been periods of exploration and underground mine and site development, as well as ownership changes that are common in historic mining areas of the northeastern Ontario.

The names associated with the past production periods were:

- La Mine d'Or Huronia, 1912 to 1919
- Argonaut Gold Mines, 1919 to 1935
- Upper Beaver Gold Mines, 1965 to 1972.

Agnico Eagle is planning to develop, operate and eventually close a new underground and open pit, gold and copper mine at the Project site. The mine will expand upon and/or modify historical underground workings, as well as facilities being developed as part of the Advanced Exploration (AEX) Program where practical, in order to mitigate and/or reduce environmental effects.

4.1.2 Existing Historical Facilities and Infrastructure

Table 4.1-1 provides a summary of the existing mine hazards present on the site or in the immediate vicinity of the proposed Project. Current and past owners have taken actions to protect the public from the historical mine hazards on the property, including rehabilitation, fencing installation and repairs, and placement of appropriate signage.

By establishing an open pit, Agnico Eagle will mitigate some of these historical liabilities, including historical tailings and mine rock (rock which is extracted in the course of mining, but does not contain sufficient mineralization to be considered ore) in York Lake. Agnico Eagle will consult with primary stakeholders and Indigenous Nations regarding remediation of the historical liabilities present. The location and scale of the facilities is shown in Figure 4.1-2.

4.1.3 Ongoing Exploration-related Facilities and Infrastructure

Periodic surface drilling programs have been ongoing for a number of years at the Project site and may continue as needed to support resource delineation (exploration) and to collect technical information (geotechnical and hydrogeological information). These programs are typically supported by temporary mobile trailer(s) and drill rig(s).

Agnico Eagle is currently undertaking an AEX Program to collect one or more bulk samples up to a maximum of approximately 60,000 t at the Project site. The bulk sample(s) and associated test work is required to confirm future mining and milling methods for the production mine (the Project). The bulk sample locations will be accessed by means of an exploration shaft and new portal.

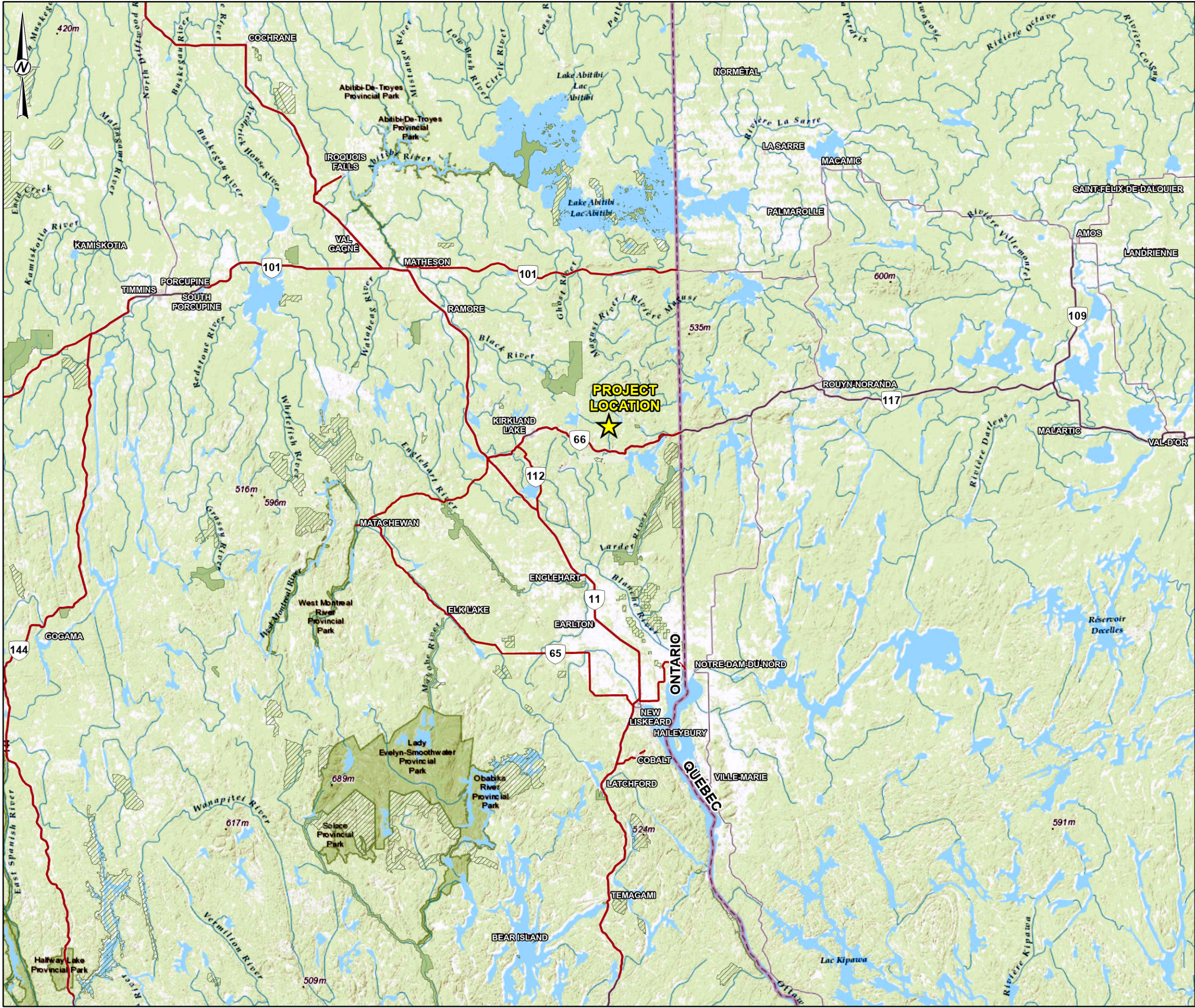
The results of testing of the material collected during the AEX Program will be used to optimize the final project design. There will be no onsite processing of ore (bulk sample material)

extracted from underground during the AEX Program and there will be no tailings storage on the site during the AEX Program.

Table 4.1-1: Existing Historical Mine Surface Features

Type of Facility	Current Status	Proposed Status at End of Mine Life
West of York Lake		
Adit 1	Present, fenced	Removed with pit
Adit 2	Present, backfilled	Removed with pit
West Mill Foundation	Rehabilitated	-
Pumphouse Foundation	Present, fenced	Removed with pit
Stope close to surface	Present, fenced	Removed with pit
Raise 1	Present, fenced	Removed with pit
Raise 2	Present, fenced	Removed with pit
Raise 3	Present, fenced	Removed with pit
Raise 4	Present, fenced	Removed with pit
Raise 5	Present, fenced	Removed with pit
Raise 6	Present, fenced	Removed with pit
Shaft #3	Capped	Removed with pit
Shaft #3 – New Adit	Backfilled, rehabilitated	Removed with pit
Tailing Area No. 1	Partially revegetated / partially in York Lake	Removed with pit
Mine Rock Pile No. 1	Present, partially revegetated	Removed with pit
Mine Rock Pile No. 2	Large volume of rock removed / partially in York Lake and partially revegetated	Removed with pit
East of York Lake		
East Mill Foundation	Present, fenced; registered as archaeological site (Argonaut Stamp Mill, Borden Number DaGw-2) Stage 3 documentation completed and it is approved for removal	Will be removed and the area rehabilitated
Shaft #1	Backfilled	-
Trench	Present east of York Lake, fenced	Will be rehabilitated
Tailing Area No. 2	Present partially revegetated	Will be rehabilitated
Tailing Area No. 3	Present partially revegetated / partially in pond draining to York Lake	Will be rehabilitated
Mine Rock Pile No. 3	Present	Will be rehabilitated

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LEGEND

- PROJECT LOCATION
- REGIONAL HIGHWAYS
- CONSERVATION RESERVE
- PROVINCIAL PARK

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. BASEMAP SOURCE: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP, GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
AGNICO EAGLE MINES

PROJECT
UPPER BEAVER GOLD PROJECT

TITLE
PROJECT LOCATION

CONSULTANT	YYYY-MM-DD	2026-06-25
DESIGNED	---	---
PREPARED	MD	---
REVIEWED	---	---
APPROVED	---	---

PROJECT NO. CA0042150.6518 CONTROL 0012 REV. A FIGURE 4.1-1

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LEGEND

- HISTORICAL MINE HAZARDS
- FENCE

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. MAP EXTRACTED FROM "2019 CLOSURE PLAN AMENDMENT" FIGURE 4.8.1, STORY ENVIRONMENTAL, JAN. 24, 2020; ORTHOPHOTOS OBTAINED FROM QUEENSTON MINING INC. LOCATIONS ARE APPROXIMATE; FENCE OUTLINE PROVIDED BY GOLDER (VIA AEM) ON 13 JUNE 2019.
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
AGNICO EAGLE MINES

PROJECT
UPPER BEAVER GOLD PROJECT

TITLE
HISTORICAL MINE REMNANTS

CONSULTANT	YYYY-MM-DD	2026-06-25
	DESIGNED	----
	PREPARED	MD
	REVIEWED	----
	APPROVED	----

PROJECT NO. CA0042150.6518	CONTROL 0012	REV. A	FIGURE 4.1-2
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4.2 Influence of Engagement with Indigenous Nations, Government Agencies and the Public

Engagement has been ongoing for several years prior to and throughout the Impact Assessment process and will continue with Indigenous Nations and stakeholders such as government agencies and the public over the life of the Project. Sections 5 and 6 of the Impact Statement provide more detail on the extensive consultation process. The Record of Consultation (Appendix B) includes detailed comments received, and responses provided, during the development of the Impact Statement.

Feedback received through engagement has been addressed through direct responses (in writing and follow-up meetings) and incorporated into the Impact Statement, as appropriate. The key comments that influenced the Project Description are summarized below:

Historical Contamination and Legacy Mining Conditions

Beaverhouse First Nation (BHFN) requested clarification on whether current and planned activities could potentially release materials associated with historical mining operations. Section 4.1.2 identifies historical mine hazards at the Property. The construction and operation of the Project would provide Agnico Eagle with an opportunity to mitigate historical mining legacies on site, by removing historical tailings and mine rock from York Lake.

Crown Pillar Stability

Apitipi Anicinapek Nation (AAN) and Matachewan First Nation (MFN) requested clarification regarding the stability of the crown pillar, including whether backfilling could be used to stabilize the existing thin crown pillar area. The crown pillar forms a barrier between surface waterbodies and historical underground workings, and geotechnical investigations identified areas of insufficient stability associated with historical mining activities. Multiple alternatives were evaluated by Agnico Eagle to address these risks, including backfilling and other stabilization measures. Based on technical, safety and operational considerations, the open pit approach was selected as the preferred option because it addresses crown pillar instability and supports remediation of historical mine features. Additional information is provided in Section 4.5.1.

Mine Design and Mining Approach

A member of the public requested clarification on the rationale for selecting the open pit design, whether the proposed open pit would remain the same size as presented during public engagement in 2022 and whether the open pit could expand beyond the current design footprint. The Project is primarily an underground mining operation, with open pit mining planned for approximately the first four to five years of operations to address geotechnical stability requirements associated with historical mine workings, remove mine rock and tailings associated with historical mining and provide safe access to the upper ore zones and underground mine. The primary goal of the open pit design, as described in Section 4.5.2, is to mitigate the risk associated with historical crown pillar instability, rather than the availability of ore near surface. Based on Project optimizations completed since the Impact Assessment Planning Phase as described in Section 4.19, the planned pit depth has been reduced, while the open pit footprint has increased slightly.

MFN requested information on the planned depth of the proposed underground ramp. Section 4.5.3 describes the proposed underground mine, including expansion of historical and AEX workings, ore extraction methods and underground support infrastructure. The underground ramp is expected to reach a depth of approximately 1,700 m during the operations phase.

BHFN requested clarification on whether Agnico Eagle plans to operate the open pit and underground mine concurrently. The open pit would operate for approximately the first four to five years of the Project to address stability considerations. After that period, the Project would primarily operate as an underground mine. The overall Project schedule is described in Section 4.4.1, and the open pit and underground mining approach is described in Section 4.5.

Water Diversion System Design

MFN, Timiskaming First Nation (TFN) and members of the public requested information regarding the proposed Misema River diversion, including its purpose, potential effects on water levels and flows, diversion alternatives and hydraulic performance. The diversion and dewatering are required to safely develop the open pit and address risks associated with historical underground workings and crown pillar instability. The diversion system has been designed to maintain flow continuity and minimize changes to existing hydrologic conditions. Alternative diversion options were assessed (Section 3), and the preferred alignment was selected because it minimizes environmental effects and supports long-term monitoring and maintenance. Additional information regarding the design of the diversion system is provided in Sections 4.5.1.1.

Water Management Infrastructure Design

BHFN, Temagami First Nation (TemFN) and TFN requested clarification regarding the design and performance of water management infrastructure, including the potential for pit flooding, flood design criteria, dyke performance and consideration of climate change. The water management infrastructure will be designed in accordance with applicable engineering standards and site-specific investigations completed as part of the Impact Assessment process and include environmental design flood criteria and climate change considerations. The integrated site water management system is described in Section 4.11.1.

Rationale for Dewatering

TFN and a member of the public requested clarification regarding the rationale for dewatering York Lake and portions of the Misema River, and the alternatives considered. Dewatering is required to safely construct the open pit, which is being developed to address the risks associated with historical underground workings and crown pillar instability. Alternative mining methods were evaluated in Section 3.4.1, but these alternatives require the dewatering of York Lake and diversion of the Misema River. Additional information on the dewatering is provided in Section 4.5.1.2.

Effluent Discharge Capacity and Operational Water Management

TFN requested clarification on the factors that influence discharge capacity. The volume of water that can be discharged at a given time is influenced by natural conditions, including groundwater inflows, seasonal water level fluctuations and water quality. These factors are managed through operational controls and regular equipment maintenance. Flow meters and pressure sensors are used to monitor the system and confirm that discharge remains effective and within applicable environmental limits throughout operations. Contact water will be collected

for storage, re-use, treatment and discharge to the environment in accordance with applicable regulatory requirements, as needed. The Project water management system is described in Section 4.11.1, and the effluent treatment and discharge are described in Sections 4.11.2 and 4.11.3, respectively.

Overburden Management and Closure Materials

MFN requested information regarding overburden management, including the quantity and quality of overburden available, storage locations, and the potential use of overburden for closure activities. Overburden removed during construction would be stored in a designated overburden stockpile southwest of the open pit, with some overburden and organic materials from the tailings storage facility (TSF) area expected to be stored locally in the TSF area to facilitate future reclamation and closure activities. The anticipated storage requirement of the overburden stockpile is approximately 1.7 Mt, subject to ongoing engineering studies. Materials generated on site would be characterized and tested during operations to inform closure and reclamation planning. Overburden and organic materials stored on site are proposed to support revegetation efforts progressively during operations and during closure. Some overburden may be returned to the open pit during closure to provide sediment suitable for benthic invertebrate colonization and to support aquatic ecosystem restoration. Further information is provided in Section 4.6.1.

Tailings Storage Facility Design, Seepage and Long-Term Stability

MFN requested information regarding the design of the proposed TSF, seepage management and long-term stability. The Project will use filtered dry stack tailings technology and the facility has been designed to provide long-term physical stability while managing runoff and seepage through the site water management system. Additional geotechnical investigations, engineering assessments and monitoring programs will be completed during detailed design and operations to confirm performance under site-specific conditions. Additional information is provided in Section 4.8.

Geochemistry

Members of the public requested information regarding the potential for long-term leaching and acid rock drainage from tailings and mine rock and measures that would be implemented to contain and mitigate associated environmental risks. Geochemical investigations have been completed for mine rock, ore, tailings and overburden to support Project design and the Impact Assessment process. Testing indicates that most mine rock is non-potentially acid generating (NPAG), while potentially acid generating (PAG) materials would be managed through an acid rock drainage and metal leaching management strategy. Tailings are characterized as non-acid generating under the conditions evaluated. Runoff from the TSF will be collected in a perimeter ditching system, while an internal underdrain system will collect seepage within the facility and direct it to the perimeter ditching. Runoff and seepage will be directed to the integrated water management system for further management. Additional information is provided in Section 4.5.5, Section 4.7.2.1 and Section 4.7.3.

Ore Processing Methods

Members of the public requested information regarding ore processing, cyanide use and environmental protection measures. Ore will be processed using conventional copper and gold recovery methods at the onsite process plant. Cyanide will be used within a contained process circuit and residual cyanide will be treated through a cyanide destruction process before

placement in the TSF. Contact water will be collected and treated before discharge in accordance with applicable regulatory requirements. Additional information is provided in Section 4.7 and Section 4.11.2.

Leach Method and Proximity to Larder Lake

A member of the public requested information regarding the proposed leaching method and proximity of the Project to Larder Lake. The Project will not use heap leaching. Ore will instead be processed using a conventional carbon-in-pulp cyanide leaching process within contained and engineered facilities, with cyanide destruction completed prior to placement in the TSF. Additional information is provided in Sections 4.7.2 and 4.7.2.1.

Extended Process Plant Operations

A member of the public requested information on how an extended life for the process plant, using external ore sources, would affect closure planning and closure timelines. The Project does not contemplate reopening other mines or processing external ore sources as part of the Project. Although the process plant could potentially process ore trucked to the site from other compatible deposits in the future, the development of other ore bodies and transport of ore would be required to meet applicable federal and provincial regulatory processes at that time and may require completion of an additional Impact Assessment or environmental assessment process and other authorizations. Accordingly, closure planning for the Project has been developed based on the currently proposed Project configuration.

Road and Boat Access

MFN requested clarification about road access, including access to Beaverhouse Lake, the boat launch and the surrounding area. Agnico Eagle has established a new access road during the AEX Program to provide continued access to Beaverhouse Lake while avoiding public interaction with industrial mine traffic. This access route will remain in place throughout all phases of the Project. Further information is provided in Section 4.17.2.

Closure and Long-Term Water Management

TFN and a member of the public requested information regarding post-closure restoration of York Lake and the Misema River, pit filling and long-term reclamation. The open pit is expected to fill naturally with water over time. There is the potential that this process could be enhanced through measures such as transferring a limited portion of the spring melt water from the Misema River system into the open pit at closure, subject to regulatory approval. The Misema River diversion system is planned to be decommissioned following the active closure phase, and will be guided by water quality monitoring, regulatory requirements and the future certified regulatory Closure Plan. Additional information is provided in Section 4.18.3.2.

Open Pit Closure and Reclamation

TFN requested information on whether the open pit is included in the closure concept. Members of the public requested information on open pit closure and reclamation plans, including whether the pit would be filled with tailings, the potential creation of fish habitat, how lake filling would be managed and anticipated post-closure site conditions. The open pit is a key component of the closure concept. Following closure, the open pit is planned to fill with water and reconnect to the Misema River system once the final water level is reached and water quality meets regulatory requirements. Placement of tailings in the pit is not currently planned. The Project Description identifies opportunities to create fish habitat, including wetland and shoal areas, as part of

reclamation of the open pit basin. Further information is provided in Section 4.18.3.2 and Section 4.18.4.

Reclamation, Revegetation and Landscape Integration

MFN noted that reclamation is the community's ultimate goal for mine closure and identified tree planting and revegetation, including potential carbon sequestration benefits, as important closure considerations. Members of the public requested further information on the reclamation of the mine site. Agnico Eagle acknowledges the importance of successful reclamation outcomes and restoring disturbed areas to a stable and self-sustaining condition. The objectives of the conceptual closure approach include re-establishing natural drainage, rehabilitating disturbed lands, confirming site runoff meets regulatory criteria and establishing a self-sustaining vegetative cover. Preliminary closure measures include regrading, contouring and revegetation of disturbed areas and use of overburden and organic materials to support progressive and final reclamation. The Project site will be revegetated to support plant and wildlife communities using commercially available native plant species and natural revegetation from local vegetation communities. Input from Indigenous Nations, including MFN, will continue to be considered during refinement of closure and reclamation objectives. Further information is provided in Section 4.18.

Long-Term Closure Outcomes and Seasonal Considerations

Members of the public requested information regarding long-term site conditions following closure and whether seasonal factors would be considered in closure planning. Closure measures have been incorporated into Project planning with the objective of promoting long-term site stability, environmental protection and ecological function. Seasonal considerations will be incorporated into closure design and monitoring programs. Additional information is provided in Section 4.18.

Post-Closure Monitoring

BHFN, TFN and members of the public requested information regarding post-closure environmental monitoring and water quality protection. Monitoring during decommissioning, closure and post-closure will form part of the certified regulatory Closure Plan and will be developed in accordance with applicable requirements. Monitoring is expected to include water quality, groundwater, vegetation, aquatic and terrestrial components, as appropriate, and will be used to support adaptive management, if required. Additional information is provided in Section 4.18.5.

Closure of Mine Infrastructure

Members of the public requested information regarding the future of the process plant, access roads, aggregate areas and other Project infrastructure following mine closure and reclamation. The conceptual closure approach assumes that infrastructure not required for long-term site management will generally be removed unless otherwise stipulated based on agreements with government agencies or local communities. Closure activities are expected to include removal of infrastructure, assessment and remediation of affected areas, restoration of drainage patterns, stabilization of disturbed areas and revegetation. Beaverhouse Road and the alternate access to the boat launch are expected to remain in place for continued use. Further information on closure of the mine site is provided in Section 4.18.3.5.

Financial Assurance and Closure Funding

MFN requested information on the amount of funding set aside for mine closure. Members of the public requested information regarding closure obligations if the mine were to be sold to another owner, costs associated with relocating the shaft headframe and potential long-term liabilities associated with Project closure and maintenance. The certified regulatory Closure Plan for the Project is currently under development and closure costs and financial assurance requirements will be established through the regulatory process. Financial assurance requirements for mine closure and rehabilitation are prescribed in Part IV of Ontario Regulation 35/24 under the *Mining Act*. Additional information on the conceptual closure approach is provided in Section 4.18.

4.3 Main Project Components

Agnico Eagle is planning to construct, operate and eventually close a new open pit and underground, gold and copper mine and processing facility at the Project site (Figure 4.3-1). The open pit, underground mine and associated surface facilities are proposed to be placed on lands held by Agnico Eagle. Where appropriate, AEX facilities will be utilized and/or expanded, as practical to minimize environmental effects. AEX facilities not required or modified for the mine are anticipated to be reclaimed during the mine operation phase.

Table 4.3-1 lists the major facilities and compares the AEX and proposed mine site plans for clarity on the proposed mine facilities and infrastructure. The list of the primary Project facilities and infrastructure is based on the current preliminary design and is subject to change with additional engineering and project optimizations.

The underground and open pit mines are proposed to operate year-round on a continuous (24-hour) basis, except for periodic maintenance and similar disruptions. Extracted ore from the mine will be transported to the surface for processing in onsite facilities. The pit is expected to operate during approximately the first four or five years of operation. Based on the proposed processing rate and current information regarding the ore body, the life of the mine could extend 14 or more years.



Table 4.3-1: Preliminary List of Mine Facilities and Comparison to Advanced Exploration Facilities

Type of Facility / Infrastructure	AEX Program	Upper Beaver Gold Project
Underground Mine		
Shaft and hoist room	Yes	Modifications to AEX facility
Surface portal and ramp	Yes	AEX portal, ramp will be extended at depth; secondary portal north of plant site
Underground workings	Yes	Expansion of historical and AEX workings
Ventilation intake raise	Yes	AEX raise and 1 new proposed
Ventilation exhaust raise	Yes	AEX raise and 1 new proposed
Compressor building	Yes	Modifications to AEX facility
Mine dry	Yes	New facility
Open Pit		
Open pit	No	New facility
Misema River diversion		
Diversion channels	No	New facility (2 proposed)
Dykes	No	New facility (3 proposed)
Stockpiles		
Mine rock	Yes	AEX mine rock used in construction; no new discrete mine rock stockpile (stored with tailings)
Overburden	Yes	New facility; AEX overburden used in construction and future reclamation
Organic soil	Yes	New facility
Ore	Yes	New facilities
Process Plant Area		
Primary crusher	No	New facility
Secondary crusher	No	New facility
Conveyors	No	New facility
Crushed ore dome	No	New facility
Process plant	No	New facility
Office	No	New facility
Laboratory	No	New facility
Electrical / mechanical shop	No	New facility
Tailings		
Tailings storage	No	New facility

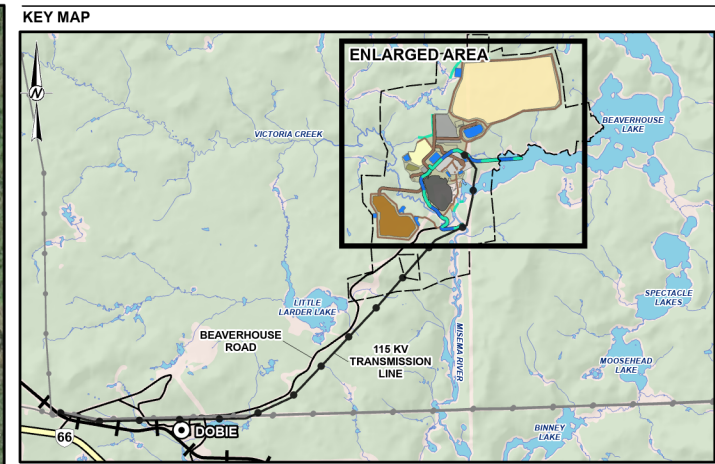
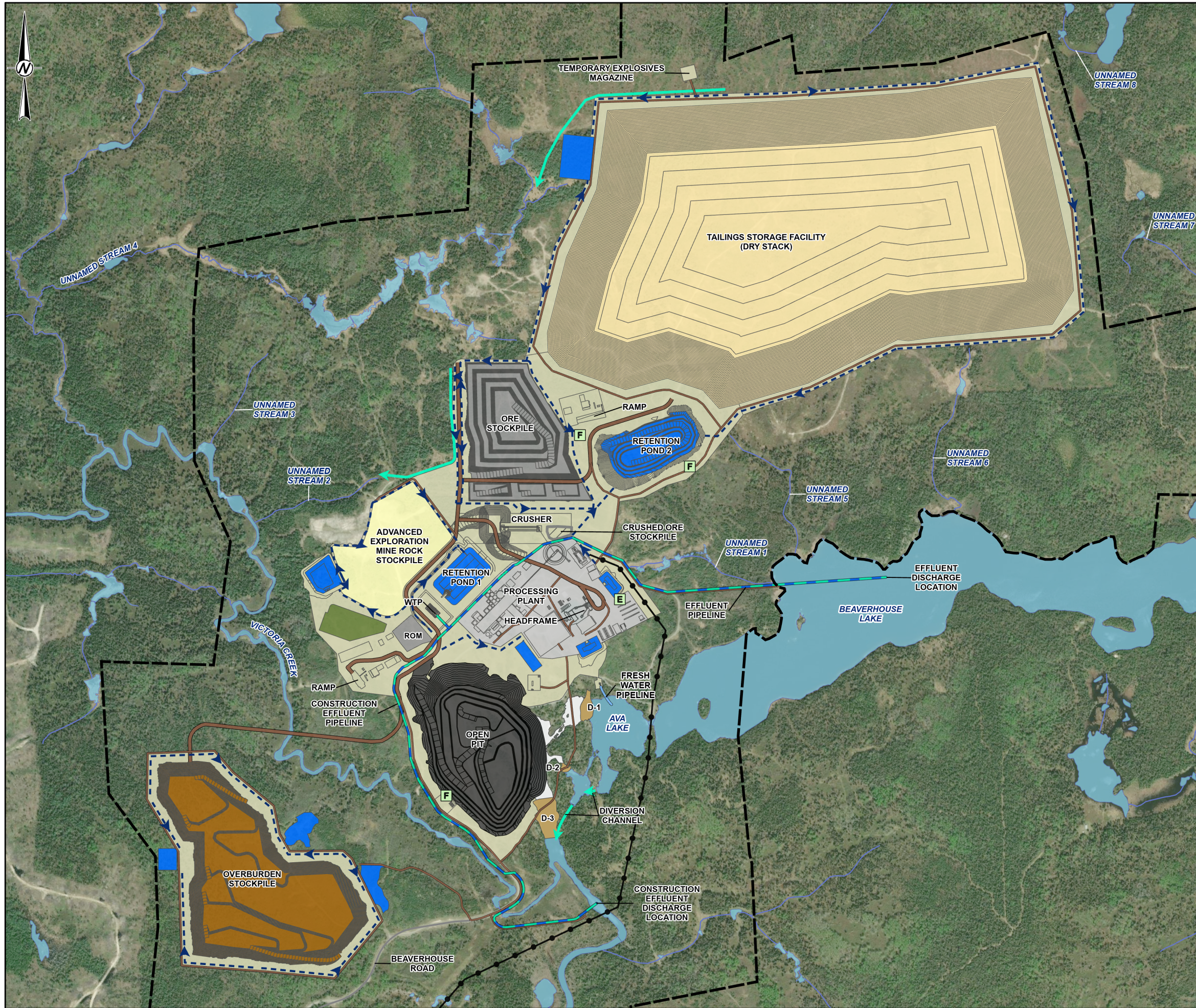


Type of Facility / Infrastructure	AEX Program	Upper Beaver Gold Project
Paste / backfill plant	No	New facility in process plant
Other Primary Buildings / Facilities		
Trade / maintenance shop	Yes	AEX facilities may be used or expanded upon if needed, or new facilities may be developed
Warehouse / storage building(s)	Yes	
Offices	Yes	
Laydown areas	Yes	Expansion of existing AEX areas
Contractor office / area	Yes	New facility
Explosive storage – surface	Yes	New facility
Explosive storage – underground	Yes	Potential new facility (or AEX facility)
Explosive manufacturing	No	No
Water Management		
Underground sumps	Yes	New facilities as needed
Primary retention pond	Yes	Potential expansion and repurposing of AEX facility to provide water to the process plant, and the addition of second retention pond for site water management
Tailings collection pond(s)	No	New facilities (2 or more)
Ditching and collection ponds	Yes	Expansion of AEX facilities
Water management / treatment plant	Yes	Expansion of AEX facility
Freshwater pumphouse	Yes	Potential expansion of AEX facility
Potable water treatment plant	No	Not planned
Water pumps and pipelines	Yes	Expansion of AEX facility
Effluent discharge pipeline	Yes	AEX facility to be used during construction phase
Operations effluent pipeline	No	New facility for discharge at Beaverhouse Lake
Waste Management		
Temporary solid waste storage	Yes	Potential expansion of AEX facility
Domestic sewage treatment	Yes	Potential expansion of AEX facility
Demolition landfill	No	Potential new facility for closure phase
Power Supply		
Emergency generator(s)	Yes	Expansion of AEX facility
Onsite distribution lines	Yes	Ongoing use and expansion of AEX infrastructure

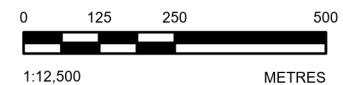


Type of Facility / Infrastructure	AEX Program	Upper Beaver Gold Project
Electrical substation	Yes	New facility and re-use of AEX facility
Fuel and Reagents		
Reagents / chemicals storage	Limited	Expanded storage will be required
Propane / CNG tank farm	Yes	Potential expansion of AEX facility
Diesel fuel tanks	Yes	Potential expansion of AEX facility
Other Onsite Infrastructure		
Other pipelines	Yes	Expansion of AEX infrastructure
Onsite access / haul roads	Yes	Expansion of AEX infrastructure
Scale	No	New facility
Cottager / land users bypass road	No	New facility
Security gatehouse / fencing	Yes	Expansion of AEX facility
Yard storage areas	Yes	Expansion of AEX facility
Coreshack	No	New facility
Parking	Yes	Expansion of AEX facility
Off-site Infrastructure		
Access road to site	No change	Upgrades to existing Beaverhouse Road if necessary, and localized re-routing at site required
Refurbished 44 kV line	Yes	Continued use, if required, until transmission line available
115 kV transmission line	No	New line, connected to regional grid subject to a provincial Class Environmental process (not part of the scope of the Impact Statement; see Section 4.14)
Accommodations	No	No

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- LEGEND**
- | | | | |
|--|-------------------|--|-------------|
| | PROPERTY BOUNDARY | | WATERCOURSE |
| | LOCAL ROAD | | WATERBODY |
- PROPOSED SITE FEATURE**
- | | | | |
|--|---|--|--------------------------|
| | OPEN PIT | | POND / SUMP |
| | VENTILATION RAISE FRESH AIR INTAKE | | DYKE (LABELLED WITH ID) |
| | VENTILATION RAISE EXHAUST | | DEWATERED AREA |
| | PROCESSING PLANT | | HAUL ROAD |
| | INFRASTRUCTURE AREA | | ACCESS ROAD |
| | CRUSHED ORE STOCKPILE | | 115 KV TRANSMISSION LINE |
| | ORE STOCKPILE | | DITCH |
| | OVERBURDEN STOCKPILE | | DIVERSION CHANNEL |
| | TAILINGS STORAGE FACILITY | | EFFLUENT PIPELINE |
| | ADVANCED EXPLORATION MINE ROCK STOCKPILE | | FRESH WATER PIPELINE |
| | ADVANCED EXPLORATION OVERBURDEN STOCKPILE | | |



- NOTE(S)**
1. ALL LOCATIONS ARE APPROXIMATE
- REFERENCE(S)**
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. IMAGERY CREDITS: SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. SITE PLAN, PROPERTY BOUNDARY AND 115 KV TRANSMISSION LINE PROVIDED BY AGNICO EAGLE, FEBRUARY / DECEMBER 2025.
4. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
AGNICO EAGLE MINES

PROJECT
UPPER BEAVER GOLD PROJECT

TITLE
PROPOSED SITE PLAN

CONSULTANT	YYYY-MM-DD	2026-06-25
DESIGNED	----	
PREPARED	MD	
REVIEWED	----	
APPROVED	----	



PROJECT NO. CA0042150.6518	CONTROL 0012	REV. A	FIGURE 4.3-1
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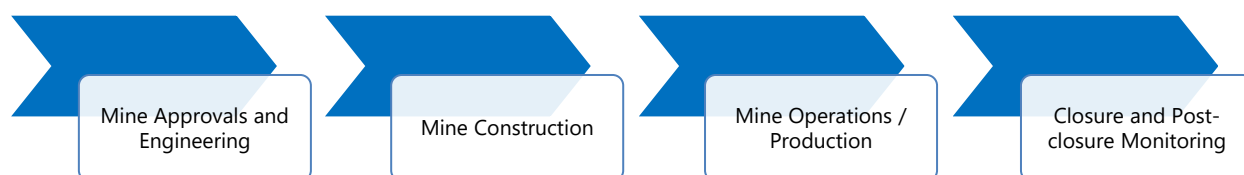
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4.4 Project Phases, Activities and Schedule

4.4.1 Overall Schedule

The Project includes the proposed construction, operation and closure of an underground and open pit, gold and copper mine. Advanced exploration, engineering and environmental activities are ongoing. Agnico Eagle initiated the approvals process for the mine through submission of an Initial Project Description in September 2021.

Broadly, the stages of the Project are as follows:



A preliminary schedule for the Project is outlined below and described briefly in the sections that follow. A preliminary listing of the proposed activities for the various stages of the Project (pre-construction / construction, operations, closure / post-closure) is provided in Table 4.4-1, with a summary in the sections that follow.

TIME PERIOD	PROJECT STAGE
Advanced Exploration	2024 to 2027
Impact Assessment Activities	2022 to 2028
Decision-making by federal Authorities	2027 to 2028
Post-decision and other Environmental Approvals	2027 to 2028
Construction	2028 to 2030
Operation	2030 to 2043
Decommissioning and Closure ⁽¹⁾	2044 to 2045
Post-closure and Monitoring ⁽¹⁾	2046+

Note:

1. Timing may be extended with additional viable ore resources not currently identified.

4.4.2 Construction Phase

Construction would begin once the Impact Assessment process is complete and the initial applicable approvals are received. Site preparation and construction of the surface infrastructure to start mining and processing activities is approximately two years. Primary construction phase activities are expected to include:

- Mine access road upgrades (if necessary) for construction, haul, and passenger mine traffic
- Site preparation activities including clearing, grubbing, earthworks and construction water management facilities (as needed)

- Construction of the diversion system (dykes and channel) in the Ava Lake and York Lake areas
- Controlled dewatering of the open pit basin
- Stripping of lakebed sediments and overburden at the open pit
- Initiation of pit development in rock
- Construction of the TSF facilities
- Construction of buildings and onsite supporting infrastructure
- Collection of water for process plant commissioning
- Stockpiling of ore for start-up
- Commissioning of the process plant
- Environmental monitoring.

4.4.3 Operations Phase

The operations phase is anticipated to last approximately 14 years and will include the following primary activities:

- Operation of the open pit for 4 to 5 years overlapping with the first years of operation of an underground mine
- Operation of the process plant
- Management of overburden, mine rock, tailings and ore in designated facilities
- Operation of water management, waste management and treatment facilities
- Environmental monitoring
- Progressive reclamation activities, where practicable.

4.4.4 Decommissioning and Closure Phase

The decommissioning and closure phase is anticipated to include an active decommissioning and closure phase of approximately two years, and a post-closure maintenance and monitoring phase. Activities to be completed during the active closure phase, if not completed progressively during operation, are anticipated to include:

- Removal of assets that can be salvaged for re-sale or re-use
- Demolition and recycling and/or disposal of remaining materials
- Removal and disposal of demolition-related wastes in approved facilities
- Reclamation of affected areas, such as by regrading, placement of an appropriate cover to facilitate revegetation if needed, and revegetation (active or passive)
- Filling of open pit to near final water level, and once the water quality meets all regulatory requirements, lowering of the dykes in a controlled manner and reconnection of the reclaimed basin to the Misema River system

- Closure and post-closure, environmental monitoring and engineering inspections.

Decommissioning and closure of the Project will be completed in accordance with applicable regulations and codes under the *Mining Act*. A comprehensive regulatory phase Closure Plan will be developed for the Project as required by the *Mining Act* (RSO 1990, c. M.14). It will also include a cost estimate for the financial assurance required to be provided, in the prescribed manner to support the performance of the closure plan activities.

Section 4.18 provides a conceptual closure strategy for both progressive and final reclamation measures. Feedback gained through ongoing consultation and engagement activities, including through the review of the Impact Statement, will be considered in the certified regulatory Closure Plan.

Table 4.4-1: Preliminary List of Activities for the Project

Project Phase	Activities
Pre-Construction and Construction	Initiation and completion of engineering study(ies)
	Corporate decision to proceed
	Development and implementation of environmental protection and monitoring plan(s) for construction
	Ongoing engagement and consultation with stakeholders and Indigenous Nations
	Application for, and receipt of environment-related permits
	Hiring of individuals and contractors, and procurement of material and equipment
	Mitigation for heritage resources, if required
	Upgrade of the access road to site and upgrades / installation of culverts as needed along existing routes and internal roadways
	Additional land clearing and implementation of erosion and sediment control measures
	Excavation, blasting, and grading as needed;
	Movement of construction materials to site
	Construction of new site facilities and/or expansion of existing facilities
	Development of fish habitat offsetting and compensation features as needed
	Construction of Misema River diversion system and stabilization
	Activation of Misema River diversion system
	Transfer of fish from York Lake and dewatering to support open pit mine development
	Stripping of overburden and initiation of open pit mine development
	Establishment of water management and treatment works, including ponds, ditches, pipelines and treatment facilities; treatment of contact waters for discharge
	Expansion of mine waste management facilities as mine development proceeds
	Environmental monitoring and reporting, including work by Indigenous monitors as applicable
	Follow up environmental studies as applicable
Operations	Receipt of outstanding environment-related permits
	Development and implementation of environmental protection and monitoring plan(s) for operation
	Ongoing engagement and consultation with stakeholders and Indigenous Nations
	Hiring of individuals and contractors, and procurement of material and equipment
	Overburden stripped from the open pit will be stockpiled, or used for progressive reclamation



Project Phase	Activities
	Mine rock extracted from the open pit will be used as construction material or stockpiled in the TSF
	Mine rock extracted from the underground workings will be retained underground and used as backfill or stockpiled in the TSF
	Ore will be extracted from the underground workings and open pit, and will be either temporarily stockpiled, or will be transported directly to the primary crusher for sizing
	Sized ore will be processed to recover the gold and copper in the same process plant, and produce gold doré bars and copper concentrate that will be periodically shipped off site for sale
	Tailings produced from processing ore will be stored in a surface facility which will be developed in phases and expanded as needed
	As operations continue, the underground mine will become progressively larger below the ground surface
	As operations continue, the open pit will become progressively larger and deeper until open pit mining ceases at approximately year 4 of operations
	Where practicable, progressive reclamation will occur on facilities when no longer needed / depleted; progressive reclamation of portions of TSF where deposition activity is complete
	Progressive reclamation of the open pit slopes and studies to support long-term success of pit lake
	Ongoing management and treatment of contact water for discharge of excess water that meets regulatory requirements
	Ongoing management of chemicals and wastes
	Environmental monitoring and reporting, including work by Indigenous monitors as applicable
	Follow up environmental studies, as applicable
Decommissioning, Closure and Post Closure	Development and implementation of environmental protection and monitoring plan(s) for closure
	Ongoing engagement and consultation with stakeholders and Indigenous Nations
	Remove mine equipment
	Underground mine and open pit to fill with water
	Seal surface openings to underground mine to support long-term site safety
	Remove reagents and chemicals for proper disposal
	Potential development of onsite demolition landfill for inert waste, and/or establishment of contracts for demolition waste removal
	Demolish facilities no longer needed with disposal of demolition waste in accordance with all regulatory requirements



Project Phase	Activities
	Investigate and remediate ground with spillage if any, such as near liquid fuel storage areas
	Remove power infrastructure when no longer needed
	Break concrete foundations down to grade or near grade
	Break up concrete pads, puncture liners, and scarify compacted grounds etc. to establish free drainage
	Regrade surface, as needed, for long-term stability and establish final surface drainage
	Place a growth material over affected areas, as needed, to promote long-term vegetation success
	Apply active and passive revegetation to affected areas
	Environmental monitoring and reporting, including work by Indigenous monitors as applicable
	Revocation of approvals to operate when no longer required
	Decommission Misema River diversion system to reconnect the refilled open pit to the Misema River system once the refilled open pit lake water quality meets regulatory requirements
	Revocation of any remaining approvals and return of reclamation financial assurance

4.5 Open Pit and Underground Mining

4.5.1 Pre-development Activities

A portion of the ore body proposed for underground mining that is key to the Project economic viability (and already mined historically) is located at relatively shallow depth near York Lake. The historical mining that occurred intermittently at the site between 1912 to 1972 left a complex network of underground stopes, raises and mining development. None of these underground workings were backfilled because the connectivity of the stopes and raises was crucial for fresh air circulation for the workers at the time. Rock stability investigations carried out between 2018 and 2020 identified that there was insufficient competent rock (crown pillar) above the existing underground mine workings for safe underground mining to occur in the future. In the most critical cases, approximately 20 m of unconsolidated materials and 20 m of bedrock are present above the existing mine workings. The crown pillar of the historical stopes below York Lake is even less; only 16 m of unconsolidated materials above 12 to 15 m of fractured rock. Agnico Eagle and its technical consultants are concerned that mining under this crown pillar could cause instability.

Proceeding with underground mining without dealing with the crown pillar issues poses an unacceptable risk for Agnico Eagle, as it could directly affect the safety of mine workers. Failure of the crown pillar could also have a substantial effect on the local surface water system in the event of an uncontrolled failure.

As a result of this rock stability assessment, Agnico Eagle investigated a number of potential engineering options that would support development of a new mine at the Project site including:

- Geotechnical stabilization of the crown pillar by means of a freezing technique
- Sterilization of resources and reserves by maintaining a safe distance from all historical mine workings
- Remote construction of underground bulkheads to isolate the historical mine workings
- Surface mining through the crown pillar with diversion of a portion of the York Lake / Misema River system.

Following review of expert studies and an internal assessment, it was determined that the best option for mining to proceed would be to construct an open pit to remove the unstable rock in the crown pillar. However, the development of an open pit in this area will require that a portion of York Lake will be temporarily dewatered during operations. To address this, Agnico Eagle has proposed to divert water flowing from Misema River into the York Lake around the open pit area, and remove the sediments and rock under the lake as well as the ore by an open pit. This would mitigate any short-term or long-term instability concerns with the crown pillar, would provide the opportunity to rehabilitate the historical tailings and mine rock located in and beside York Lake, and maintain the viability of the Project. This option was selected as the preferred option that would allow the Project to proceed and leave the site in a better condition for future public access from the perspective of historical underground mine stability.

4.5.1.1 Misema River Dykes and Diversion Channels

A system of dykes, a wave berm, and channels will be constructed (Figure 4.5-1) so that the Misema River can be safely diverted around York Lake, thereby maintaining the integrity of the

river system and allowing the open pit basin to be dewatered. The conceptual design, subject to detailed engineering, has three short dykes (approximately 10 to 75 m in length) placed at the west end of Ava Lake and below York Lake, a wave berm (approximately 50 m in length), and two channels (25 and 125 m in length) joining Ava Lake directly to the Misema River downstream of York Lake. The northernmost dyke is anticipated to be situated upstream of the main natural connection between Ava Lake and York Lake which is currently a shallow rapid section leading from a shallow (0.75 m deep) section of Ava Lake.

The dykes and wave berm will be designed to prevent water from entering the open pit area and redirect it around the working area by way of the diversion channels which will provide the new path for the water to flow from Ava Lake to the Misema River. This diversion will be designed to mimic natural hydrologic conditions to convey the necessary water flows without holding water back, as well as allowing passage of fish. Creation of enhanced aquatic habitat within the channels, similar to the natural condition of the current connection between Ava Lake and York Lake, is being considered.

During the first year of the construction phase, three dykes will be constructed at York Lake and Ava Lake to facilitate isolation and dewatering of the open pit area of York Lake (Figure 4.5-1). The dykes have been designed and positioned to meet the following requirements:

- Establish a hydraulic barrier between Ava Lake (upstream) and the Misema River (downstream) and the open pit basin area following controlled dewatering
- Provide sufficient freeboard above the lake level for protection during storm events for worker safety, along with protection from ice heaving that may occur in the winter
- Maintain stability during and following open pit basin development (meeting or exceeding regulatory factor of safety requirements), as well as after controlled refilling with water at the end of mine life
- Account for lake bed geotechnical foundation conditions
- Provide for a safe open pit work area.

The design of the dykes includes sufficient freeboard above the elevation of Ava Lake to prevent flooding in the open pit basin during spring freshet and extreme storm events. This freeboard is considered as 1 m above the inflow design flood (IDF) water level. Ongoing monitoring of water levels in Ava Lake using in situ monitoring stations will continue during all phases of the Project. The design includes dykes with a minimum crest width of 15 m and lengths varying from approximately 10 m to 75 m. Dyke height (height from dyke crest to lake bottom) will vary due to the natural undulations in the lake bed. The two channels will be approximately 25 m and 125 m in length and sized to safely convey the IDF.

The dykes are designed to meet the factors of safety required by guidelines and regulations such as the CDA (2013, 2019) Dam Safety Guidelines and supporting technical bulletins and the *Lakes and Rivers Improvement Act* (RSO 1990, c. L.3) for long-term static loading conditions, as well as pseudo-static loading conditions. The recommended IDF during operations is based on the dam classification under the CDA guidelines (CDA 2013, 2019); identified as 2/3 between a 1:1,000 year flood and the probable maximum flood (PMF). An IDF represents the most severe inflow flood (peak, volume, shape, duration, timing) for which a dam and its associated facilities are designed (CDA 2007). Instrumentation and monitoring will be installed within the dyke fill and foundation materials to monitor the dykes.

Final design will be determined through the provincial approvals process. The dykes are proposed to consist of a zoned embankment shell and an engineered hydraulic barrier. The dykes will be constructed primarily of crushed rock and mine rock, tied into the bedrock including the shoreline as needed. A layer of riprap is included on the upstream face in the wave action zone to protect the dykes from erosion. The dykes will require approximately 150,000 m³ of rock fill, the majority of which is anticipated to be sourced from onsite stockpiles or activities. The dyke slopes are designed to be constructed at a maximum slope angle of 2 horizontal to 1 vertical (2H:1V).

Turbidity barriers (e.g., silt curtains) will be installed on both sides of the dykes and downstream of the channels prior to construction and supplemented as needed to contain suspended sediment potentially generated during construction. Once environmental protection measures are in place, the dykes will be advanced from the shoreline as homogeneous rockfill embankments using rock sourced from onsite, or potentially other permitted aggregate sources. The dykes will be constructed according to established design and construction methods:

- Foundations will be stripped, where needed.
- Dykes will be advanced to a level above the normal water elevation.
- Excavated material will be contained and used, where appropriate.
- Dykes will be advanced, including the hydraulic cut-off wall, to the final designed height.

4.5.1.2 Pre-development Controlled Dewatering

Once the York Lake basin and a portion of Ava Lake basin have been isolated, fish removal and controlled dewatering will occur. Agnico Eagle will work closely with Indigenous Nations and regulators to develop a plan to relocate the fish prior to dewatering to reduce incidental mortality. The fish removal plan will include the means of fish removal, care and handling measures, and identification of adjacent waterbodies that can receive the fish based on suitable habitat and the fish species present.

Controlled dewatering of York Lake and portion of Ava Lake will be completed in a manner to mitigate potential environmental effects by directing water directly to the Misema River or towards water management facilities for settling and treatment, if required, prior to discharge. The settling pond and related infrastructure will be set up early in the construction phase to receive the water, including TSS-laden water when needed. Gravity settlement will be the primary means of treatment; flocculant or other means may be used if needed to help settle suspended sediments.

As a base case, controlled dewatering of the basins is expected to take up to approximately one month to complete, based on continuous (24-hour, 7-day per week) pumping.

4.5.2 Open Pit Mining

Agnico Eagle proposes to develop an open pit that will partially intersect York Lake at surface (Figure 4.5-2) but avoids Victoria Creek to the west and Ava Lake to the east. The pit will be about 100 m in depth and 300 m in diameter. Following dewatering of the York Lake basin, unconsolidated material overlying the ore body will need to be stripped to access the rock. Four types of material are expected to be encountered: terrestrial overburden, lakebed sediments, historical mine rock, and historical tailings. Each of these materials will be removed using

excavators and/or other equipment as appropriate and transferred using haul trucks. Terrestrial overburden will be encountered in areas outside of the York Lake basin. This material will be transported to the overburden stockpile for storage (which may occur contemporaneously with dewatering). Once the lake has been dewatered, lakebed sediments will be excavated and transported to the overburden storage facility; historical mine rock and tailings will be transported to and stored within the TSF. The historical tailings may also be transported to a designated area adjacent to the AEX mine rock stockpile for processing in the process plant for residual minerals prior to final placement within the TSF.

The benches in rock will be developed by blasting using an explosive. Water in the open pit will be managed by an underground pumping station that will keep the open pit dry. As needed, small pumps will be installed in the base of the pit for trapped water. Excess water will be pumped to the surface for management. The slopes of the pit walls will be designed for safety based on industry standards.

The open pit has been included in the overall mine plan with a primary goal of mitigating the risks associated with the instability of the historic crown pillars. It has been designed with a single bench height of 7.5 m, using a double-bench height of 15 m between catch benches (a horizontal break in the slope to mitigate the potential for falling rock rolling down the pit walls for the protection of workers and equipment below). The resulting inter-ramp angle varies from 39° to 49°. Overburden slopes are anticipated to be sloped at 2 horizontal to 1 vertical (2H:1V), with bench widths of 10 m in areas of overburden in excess of 20 m thick; however, this is subject to site conditions and detailed engineering. The entry / exit point to the open pit is situated at the northwest end in proximity to the overburden storage and haul road. Mine rock will be used for construction, or sent to the TSF. This placement aids in optimizing the haul cycle times.

Subject to equipment availability, the current design of the ramps and roads within the open pit are to accommodate a fleet of 40-tonne haul trucks. The open pit will primarily be serviced by two-lane roads with the following design characteristics:

- Total width: 20.0 m
- Ditch width: 1.6 m, to collect seepage and runoff along the walls of the open pit
- Lane width: 14.6 m (three times the largest vehicle width to accommodate two-way traffic)
- Safety berm: 2 m wide by 1 m high (height of haul truck wheel radius)
- Outer edge: 1.8 m.

Single lane roads will be placed in the bottom five 7.5 m benches toward the end of open pit production, anticipated to be approximately Year 3 to Year 4 of operations. These roads will have the following design characteristics:

- Total width: 15.0 m
- Ditch width: 1.6 m
- Lane width: 9.8 m (two times the largest vehicle width)
- Safety berm: 2 m wide by 1 m high (height of haul truck wheel radius)
- Outer edge: 1.6 m.

Blasting within the open pit will be undertaken to break up rock for loading into haul trucks for transport. Ore will be blasted using a 2.9 m by 2.9 m blast pattern to optimize sizing for the crusher, while mine rock will be blasted using a 3.0 m by 3.0 m pattern. The crest of the ultimate open pit is situated 2 km or more from the closest cottages, and 5 km or more from the closest permanent residences. Blasting has been designed such that vibration and overpressure limits at these receptors is not exceeded. Blasting mats will be used for fly rock control until a safe depth within the pit has been reached.

Ore will be transported either to the ore stockpile or directly to the process plant (Section 4.6). Mine rock will be used to backfill the historical underground workings intercepted during open pit mining, and/or sent to the TSF. Some mine rock may be used for construction material if it meets the required specifications and is NPAG in accordance with an ML / ARD management plan.

4.5.3 Underground Mining

The underground mine will expand on the historical and AEX workings (Figure 4.5-3). Ore will be extracted from underground stopes by conventional drilling and blasting. Oversized rock will be managed through secondary blasting, use of a rock breaker or other suitable equipment as needed. All ore will be either trucked to the surface via a ramp or transported via the shaft. Personnel will access the underground workings by means of a shaft or ramp, depending on the location. Underground mining operations will be supported by necessary ventilation-related infrastructure.

Mine rock associated with the mine development will be retained underground and re-used to backfill the mine where practical. Excess mine rock that cannot be re-used underground will be stored in the TSF. Some material will be re-used as construction aggregate if warranted by rock geochemistry.

As mining progresses, stopes which have been mined out will be backfilled with cemented paste backfill (CPB) or rockfill. The paste backfill plant will be located on surface within the process plant. Backfill material will consist of dry tailings which will be conveyed from the filter press area of the process plant to the backfill plant, mixed with water and hydraulic binder and will be pumped to various boreholes located above the underground mine. Paste will be distributed to the stope via an underground piping system.

Underground mining, in combination with open pit mining described above, will occur at an annual average ore mining rate of approximately 4,000 to 10,000 tpd, with peak mining rates of up to 15,000 tpd. The mining rate will be confirmed through ongoing engineering and design activities.

4.5.4 Mine-related Infrastructure

Mine haul roads are required to connect the open pit and underground mines to the TSF, stockpiles, the primary crusher and associated mine facilities (i.e., maintenance shop, fuel dispensing and truck wash). The roads will be approximately 14.6 m wide to accommodate two-way heavy equipment traffic between locations. Smaller service roads will be approximately 6.5 m wide, to accommodate light passenger traffic. The total length of the mine haul roads and other service roads outside the pit limit is approximately 16 km. Haul road and lighter vehicle road crossings have been limited in the design for safety reasons.

Explosives will be required primarily for the rock extraction in the open pit and underground mine but will also be needed for other onsite construction work. Explosives needed for open pit and underground mining (and potentially for site preparation / diversion construction) will be prepared by a contractor and delivered to site under their care and control as required. As a result, only explosives storage area will be required on site. The location of any explosives-related facility on site will follow all federal regulatory guidance, including as related to siting (BNQ 2015). An explosive storage facility is currently proposed north of the TSF (Figure 4.3-1) during construction and open pit operation. Underground explosives will be stored underground during operation.

4.5.5 Geochemistry of Materials

Geochemical investigations have been undertaken for the Project beginning with a baseline ML / ARD assessment in 2013 in support of the AEX Program. Subsequent investigations were completed through three major sampling phases between 2018 and 2025 to support the Project and the Impact Assessment process. The initial Phase 1 program (2018) focused on AEX Program underground mine rock materials, while Phase 2 expanded characterization to encompass the full spatial extent of the proposed Project underground workings and open pit. Following incorporation of the northeast basalt deposit and Retention Pond 2 excavations into the mine plan, a third sampling phase (Phase 3) was completed to characterize these additional mine development areas.

Across the three sampling campaigns, a total of 374 mine rock and ore samples were collected and submitted for geochemical characterization, comprising 310 mine rock samples and 64 ore samples. The sample inventory was selected to provide representative coverage of lithology, grade, spatial distribution, and mine plan components associated with both underground and open pit development (Lorax Environmental 2026).

A separate overburden characterization program was completed through test pitting campaigns conducted in 2020 and 2021. These investigations yielded 95 overburden samples, representing materials expected to be stripped during construction and operations, including areas associated with the open pit, TSF, and other project infrastructure.

All mine rock, ore, and overburden samples underwent routine static geochemical testing, including acid-base accounting (ABA) and elemental composition analyses. Additional detailed investigations were completed on selected subsets of samples and included:

- Mineralogical characterization using QEMSCAN and TIMA techniques (29 mine rock samples and 2 tailings samples)
- Shake flask extraction (SFE) testing (32 mine rock / ore samples, 10 tailings samples, and 13 overburden samples)
- Four-acid elemental digestion analyses (197 mine rock and ore samples) to support development of geochemical proxy relationships for block model PAG delineation
- Mercury-specific investigations involving additional SFE testing, aqueous mercury speciation, and sequential extraction analyses
- Net Acid Generation testing on selected overburden samples (13 samples).

To evaluate long-term weathering behaviour and support geochemical source-term development, an extensive kinetic testing program was initiated. The mine rock kinetic testing

program included nine humidity cell tests (HC1–HC4, HC7–HC11) representing the major mine rock lithologies, a mixed-lithology PAG sample, and material from the northeast basalt deposit. Several humidity cells remain ongoing beyond the standard 40-week test period to further evaluate long-term weathering behaviour.

Tailings kinetic testing included humidity cells, saturated column testing, and unsaturated column testing conducted on representative tailings generated through metallurgical programs completed between 2019 and 2025. Several unsaturated column experiments remain ongoing.

Field-scale kinetic testing was initiated at the site using six mine rock field bins and one blank control bin constructed from representative lithologies, a high-sulphur PAG composite, and material from the northeast basalt deposit. The field bin testing program was established in 2022 and remains ongoing to evaluate mine rock weathering and metal leaching behaviour under site-specific climatic conditions.

4.5.5.1 Overburden Materials

Overburden materials at the site can be broadly classified as either brownfield or greenfield. Brownfield overburden is limited to areas containing historical tailings, mine rock and/or have been affected by previous historical mining activities. Brownfield materials are situated on lands located within and immediately to the east and west of York Lake. The brownfield overburden will be stored in the overburden stockpile. In contrast, greenfield overburden materials have not been affected by historical mining related or AEX activities. Greenfield overburden will be stored in the northeast portion of the TSF.

Greenfield overburden materials were characterized using 95 samples collected during the 2020 and 2021 test-pitting programs. Static geochemical testing included ABA, elemental abundance analyses, shake flask extraction testing and, for a subset of samples, Net Acid Generation testing. Overburden materials exhibit unique geochemical characteristics and a low PAG proportion (< 5%). Special handling of overburden materials is not currently proposed on the basis of ML / ARD characteristics. The results indicate generally low sulphur contents and limited potential for acid generation (Lorax Environmental 2026).

SFE testing was completed on 13 selected overburden samples to assess short-term leachability. Overburden materials have a low overall PAG proportion (< 5%) and no special handling measures are currently proposed based on their geochemical characteristics (Lorax Environmental 2026).

4.5.5.2 Mine Rock

A total of 310 mine rock samples were analyzed as part of the ML / ARD assessment (Lorax Environmental 2026). More than 90% of samples contain less than 2% total sulphur, although values range from 0.005% to 28%. Median total sulphur concentrations vary by lithology and range from 0.04% in Late-Stage Dykes to 0.27% in Mafic Syenite Porphyritic samples. The Blake River Mafic unit, which represents the largest mine rock population, has a median total sulphur content of 0.10%. Sulphide sulphur represents the dominant form of sulphur across the database and comprises more than 90% of total sulphur in over 83% of samples. Sulphate minerals were detected only at minor abundances in a subset of samples and include gypsum, jarosite, and alunite. To provide a conservative evaluation of acid-generating potential and avoid underestimating sulphur contributions from any source, total sulphur content was used as the basis for acid potential calculations throughout the assessment.

Mineralogical investigations completed on 29 mine rock samples indicate that pyrite and chalcopyrite are the dominant sulphide minerals. Pyrite is the primary sulphide mineral in 70% of the analyzed samples, whereas chalcopyrite is the dominant sulphide in six samples. Total sulphide abundances quantified by QEMSCAN / TIMA correlate well with sulphide sulphur contents determined by ABA testing.

Carbonate minerals are present in all analyzed mine rock samples and comprise calcite, dolomite, ankerite, and siderite. Carbonate phases are interpreted to be the primary source of neutralization potential (NP) across Upper Beaver lithologies. Mine rock samples exhibit median Modified NP values that vary by lithology, ranging from 35 kg CaCO₃ per tonne in Gabbro to 87 kg CaCO₃ per tonne in Mafic Syenite Porphyritic material. Comparison of mineralogical and geochemical data indicates that carbonate minerals, including calcite, dolomite, and the calcium / magnesium-bearing component of ankerite, are the principal contributors to NP.

Acid generation potential was assessed using the neutralization potential ratio (NPR). Under the standard classification approach, 33 of 310 mine rock samples (11%) are classified as PAG. The highest PAG proportions occur in Volcanoclastic (33%) and Tisdale (23%) lithologies. Gabbro, Mafic Syenite Porphyritic, and Late-Stage Dyke samples are entirely NPAG under the standard classification scheme. No PAG samples were identified in the northeast basalt deposit dataset. Within the main deposit, 12% of mine rock samples were classified as PAG, with substantially greater PAG occurrence in underground mine rock (16%) compared with open pit mine rock (4.1%). Within the PAG mine rock population, Modified NP values range from 3.7 to 138 kg CaCO₃ per tonne, with a median value of 34 kg CaCO₃ per tonne. This available NP is expected to delay the onset of ARD in much of the PAG mine rock population for extended periods, potentially on the order of decades.

Preliminary delineation of PAG materials was undertaken using geochemical proxy relationships developed from the ML / ARD dataset and incorporated into the geological block model. Review of calcium / sulphur as a proxy for NPR demonstrated moderate to strong correlations across lithological units and digestion methods. To provide an additional level of conservatism, any material with a total S content of 0.74% or greater will be classified as PAG regardless of calculated calcium / sulphur ratios.

Short-term leachability and long-term weathering behaviour were evaluated using SFE testing and kinetic tests, including humidity cells and field bins. The SFE results provide a preliminary assessment of elemental mobility and solubility limits. None of the mine rock humidity cells produced acidic conditions during the initial 40-week test program, and selected experiments were extended to further evaluate long-term behaviour. Mine rock kinetic testing has been conducted to support source term development and ML / ARD management planning. The SFE results are compared against Ontario Provincial Water Quality Objectives for the protection of aquatic life (PWQO). A screening threshold of 5 times the PWQO concentration is used as a preliminary means to highlight parameters of potential concern. Parameters of interest are defined as constituent concentrations that are above the respective PWQO. Importantly, water quality modelling will be used to evaluate whether flagged or other parameters will have the potential to cause adverse environmental effects in the downstream receiver(s). For mine rock samples, the only parameter greater than 5 times the PWQO in SFE leachate is molybdenum, which showed elevated values in three samples. Parameters of interest include aluminum, arsenic, cadmium, copper and vanadium.

In order to prevent the development of acidic conditions and associated metal leaching, management options are being explored for PAG mine rock during the Project. A monitoring and management plan for ML / ARD is being developed to provide practical guidance with respect to mine rock storage considerations in accordance with geochemical best practices. This plan will be continually updated as the understanding of the deposit's geochemical characteristics is improved. Potential management approaches under consideration include backfilling PAG mine rock within underground workings and subsequent flooding for subaqueous storage, co-disposal of PAG material within the saturated zone of the TSF, and engineered placement of PAG material within NPAG domains.

4.5.5.3 Ore

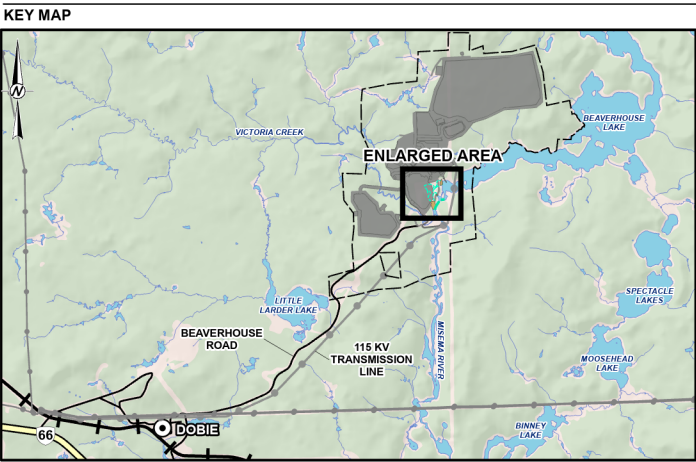
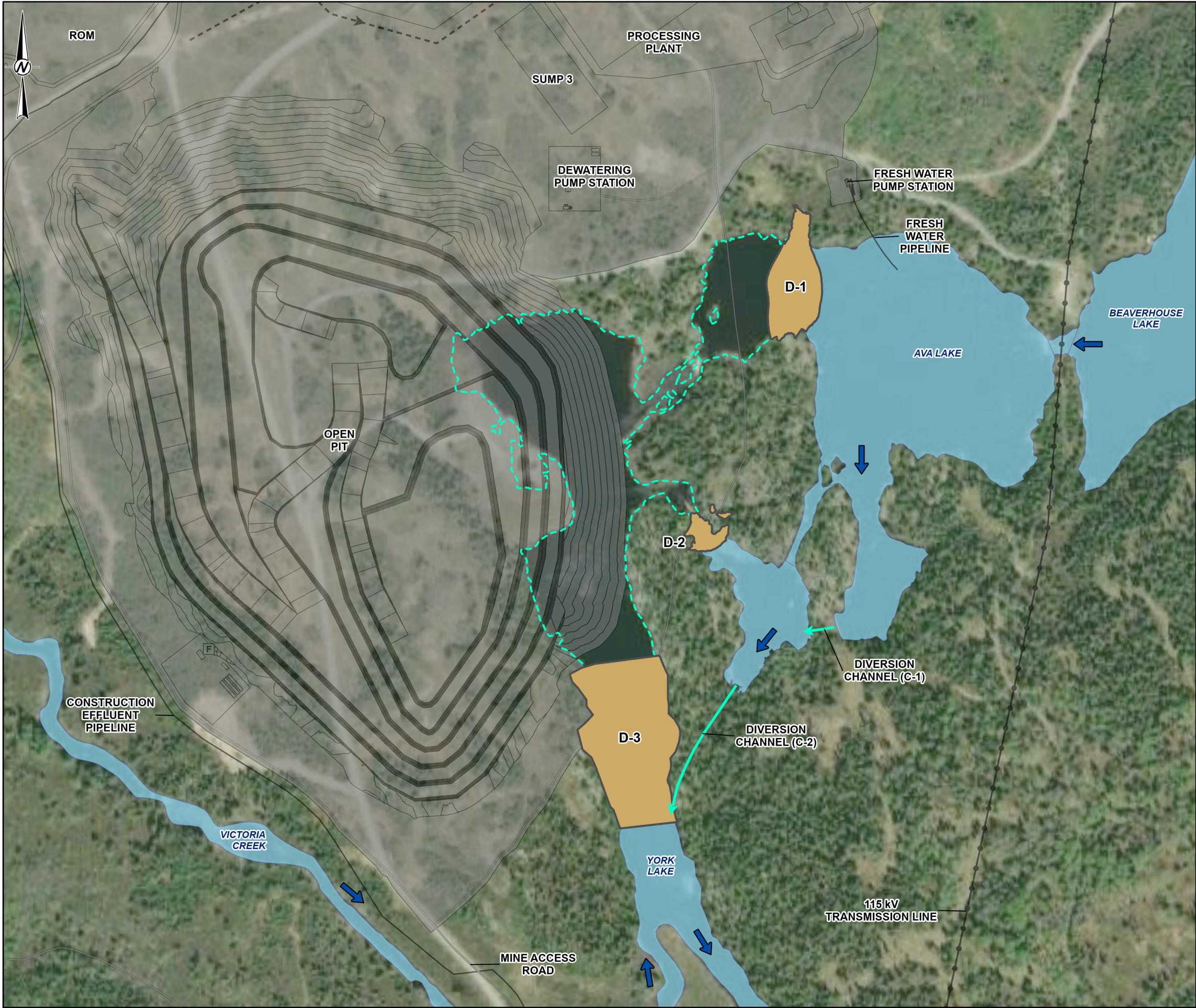
A total of 64 ore samples were included in the ML / ARD assessment (Lorax Environmental 2026). Total sulphur contents range from 0.009% to 16%, with a median concentration of 0.30%. Ore samples exhibit generally circum-neutral to alkaline paste pH values and a median Modified NP of 84 kg CaCO₃ per tonne. Under the standard NPR classification, 7 of 64 ore samples (11%) are classified as PAG. Under the sensitivity classification, the PAG proportion increases to 16%.

Ore mineralization is associated primarily with sulphide minerals including pyrite and chalcopyrite. Carbonate minerals, including calcite and ankerite, are common and contribute substantially to neutralization potential. Median carbonate NP and Modified NP values are 90 and 84 kg CaCO₃ per tonne, respectively, indicating a substantial acid-buffering capacity in much of the ore.

4.5.6 Critical Minerals Potential

Critical minerals are essential resources that play a crucial role in various industries, including technology, manufacturing, defense, and especially renewable energy towards national and global decarbonization. Increase in current demand and forecasts are driving initiatives such as Ontario's Critical Mineral Strategy (Ontario Government 2022), which aims to support the development of the critical mineral sector to secure resilient supply chains while unlocking economic growth and infrastructure development. Federal and provincial governments have released a list of 34 and 33 critical minerals, respectively. The Project will be a producer of copper, which is included on both the federal and provincial critical minerals lists.

Copper is a key component across multiple high technology sectors, particularly within electronics and renewable energy, particularly for uses in development of the electrical distribution network across the country, as well as use in electric vehicles.



SCALE: 1:120,000

- LEGEND**
- PROPERTY BOUNDARY
 - WATERBODY
 - FLOW DIRECTION
- PROPOSED SITE FEATURE**
- DYKE (LABELLED WITH ID)
 - DIVERSION CHANNEL (LABELLED WITH ID)
 - DEWATERED AREA
 - OTHER SITE FEATURE
 - VENTILATION RAISE FRESH AIR INTAKE
 - 115 KV TRANSMISSION LINE
 - DITCH



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

- REFERENCE(S)**
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
 2. IMAGERY CREDITS: SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
 3. SITE PLAN, PROPERTY BOUNDARY AND 115 KV TRANSMISSION LINE PROVIDED BY AGNICO EAGLE, FEBRUARY / DECEMBER 2025.
 4. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
AGNICO EAGLE MINES

PROJECT
UPPER BEAVER GOLD PROJECT

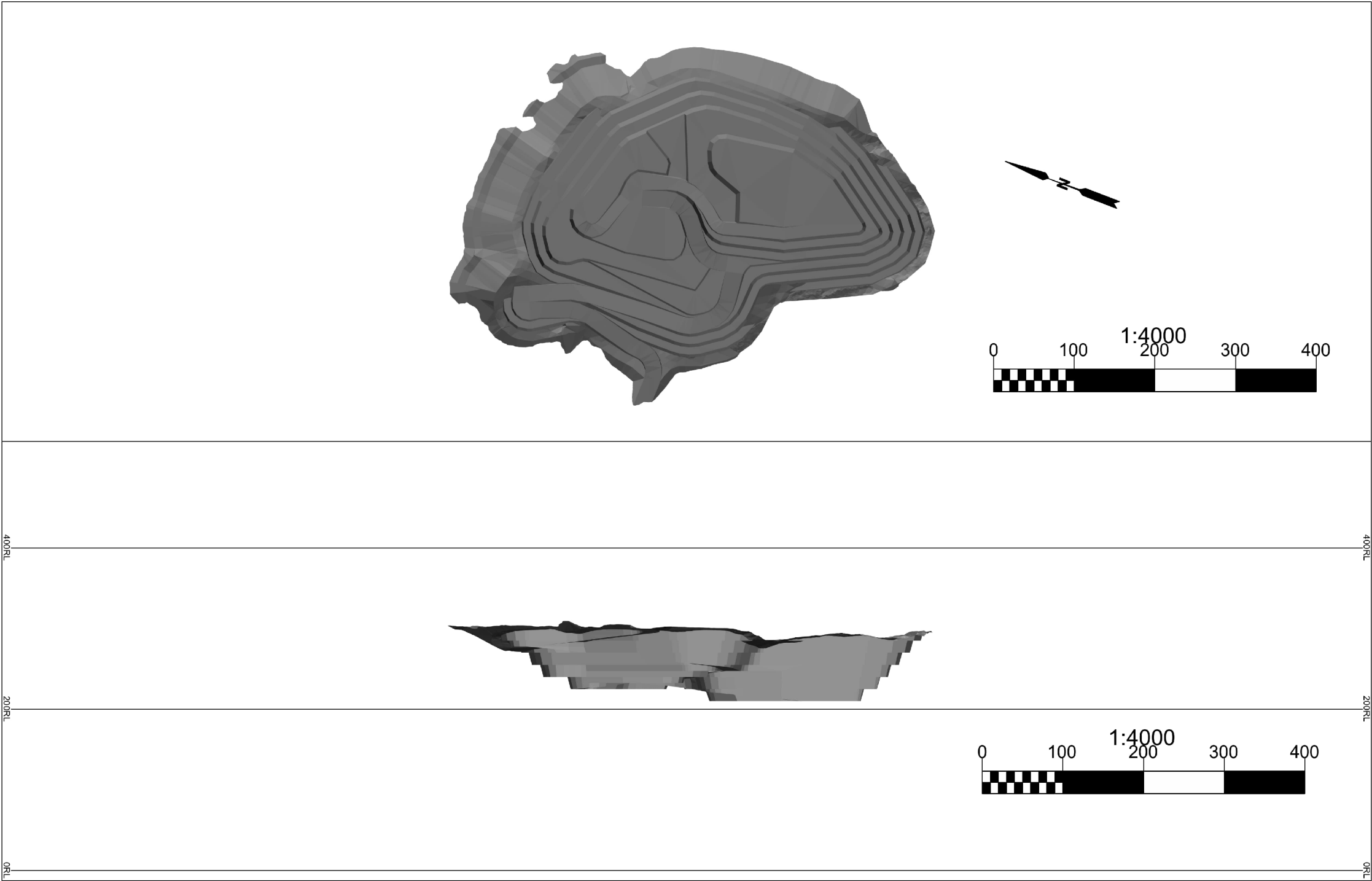
TITLE
MISEMA RIVER DYKES AND DIVERSIONS

CONSULTANT	YYYY-MM-DD	2026-06-25
	DESIGNED	----
	PREPARED	MD
	REVIEWED	----
	APPROVED	----



PROJECT NO. CA0042150.6518	CONTROL 0012	REV. A	FIGURE 4.5-1
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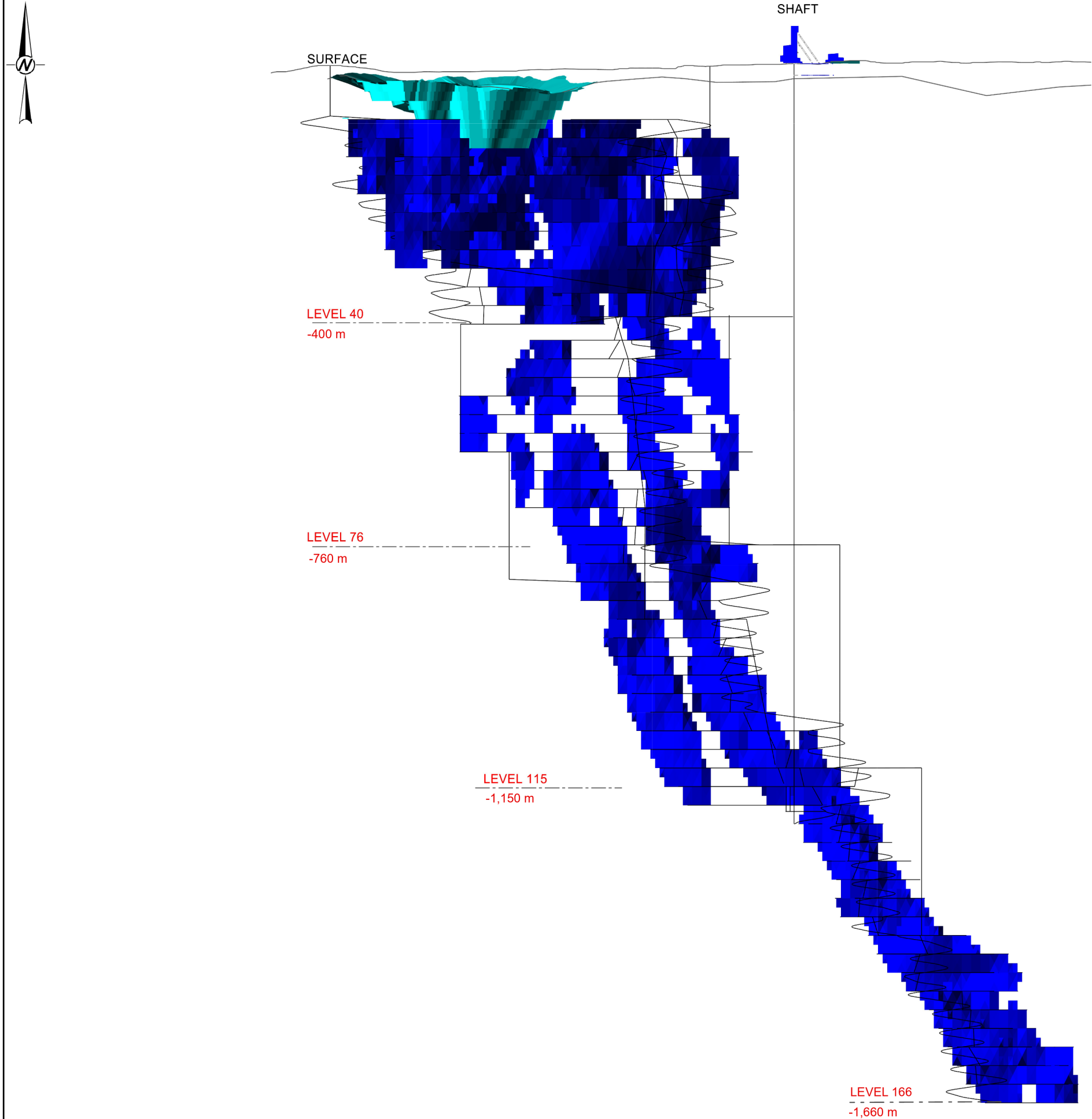
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NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE		
REFERENCE(S) 1. OPEN PIT SCHEMATICS PROVIDED BY AGNICO EAGLE, MAY 2026.		
CLIENT AGNICO EAGLE MINES		
PROJECT UPPER BEAVER GOLD PROJECT		
TITLE OPEN PIT SCHEMATIC		
CONSULTANT	YYYY-MM-DD	2026-06-25
	DESIGNED	----
	PREPARED	MD
	REVIEWED	----
	APPROVED	----
PROJECT NO. CA0042150.6518	CONTROL 0012	REV. A
		FIGURE 4.5-2

25mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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LEGEND

OPEN PIT

MINERALIZED AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. MINE PLAN LAYOUT PROVIDED BY AGNICO EAGLE MINES, 2021.

CLIENT

AGNICO EAGLE MINES

PROJECT

UPPER BEAVER GOLD PROJECT

TITLE

PRELIMINARY MINE PLAN LONGITUDINAL VIEW

CONSULTANT	YYYY-MM-DD	2026-06-25
DESIGNED	----	
PREPARED	MD	
REVIEWED	----	
APPROVED	----	

PROJECT NO.

CA0042150.6518

CONTROL

0012

REV.

A

FIGURE

4.5-3

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25mm

4.6 Stockpiles

A mine rock stockpile and overburden stockpile are currently in place from the AEX Program. Material currently stored is planned to be used as construction material for roads, pads, and other related site features. Mine rock in this stockpile will be re-used during the construction phase. Some residual material may remain in this area during part of the operations phase of the Project, and the area is expected to remain available as a contingency storage area. The overburden stockpile established as part of the AEX Program will be contoured and revegetated as needed for stability, with the material used for progressive reclamation activities during the life of the Project.

The AEX stockpile areas do not have sufficient capacity to accommodate the material from the Project. Stockpiles will be created on the site for the Project to store ore, overburden and organics resulting from the open pit and underground mine development as well as overburden and organics stripped during general site development and following dewatering of York Lake, as shown in Figure 4.3-1. The overburden stockpile and ore stockpile are situated such that they do not overprint waterbodies frequented by fish.

Runoff from the stockpiles will be collected in ditches and ponds for management as part of the integrated water management system. This water will be re-used in the process plant for ore processing and other industrial uses, or treated and discharged to the environment in accordance with applicable regulatory requirements.

4.6.1 Overburden

Development of the site will involve removal of surficial overburden and organic materials to allow for mining of bedrock material, as well as for preparation of some site facilities. Areas anticipated to require removal of these materials include:

- Terrestrial portions of the open pit
- Process plant area
- Portions of the dry stack TSF.

Subject to ongoing engineering studies, the anticipated storage requirement of the overburden stockpile for the Project is approximately 1.7 Mt. The stockpile is proposed to be placed to the southwest of the open pit and will have a surface area footprint of approximately 33 ha, and height of 30 m.

Some of the overburden and organic materials from the TSF are expected to be stored locally in the TSF area to facilitate progressive reclamation and closure activities. The volume of these materials to be stored is accounted for in the design of the TSF.

Where practicable, organic materials from surficial materials will be stored separately from mineralized overburden in order to prioritize availability for reclamation activities.

4.6.2 Mine Rock

Agnico Eagle does not intend to develop a separate mine rock stockpile for the Project.

Mine rock generated during the first years of open pit production will be either stored in portions of the existing underground workings as backfill or NPAG mine rock material will be used as construction material throughout the Project site. The remaining mine rock not used in site

construction (approximately 6.8 Mm³) will be utilized in the development of the TSF or placed within the TSF for storage with the tailings produced by the process plant. Of this 6.8 Mm³, approximately 89% will be NPAG, with the remaining 11% considered PAG material. . A portion of the PAG mine rock will be returned underground as backfill, where it will be managed within the underground mine workings. The remaining PAG mine rock requiring surface storage will be placed within the tailings storage facility (TSF), as described in Section 4.8.3.

4.6.3 Ore

Six ore stockpiles are currently planned for the Project to support the storage, handling, and management of ore over the life of mine. The purpose, capacity, and design characteristics of each stockpile are described below.

The smaller run-of-mine (ROM) stockpile will be established to the northwest of the open pit and hold approximately 0.13 Mt of ore from a portion of the underground workings. This stockpile will have a footprint of 0.8 ha. This stockpile is used to reduce cycle times for the mine haul fleet, depositing ROM material near the ramp to the open pit or underground, at which point it is transferred by a surface fleet to the crusher or ore stockpile. This stockpile is intended for short term storage of material only, with a capacity for approximately 24 to 36 hours of storage.

The primary ore stockpile will be established between the process plant and the TSF, and represents the primary location for storage of ore prior to introducing it into the crushing and processing circuit. This stockpile is currently anticipated to have a capacity of approximately 2.1 Mt, consisting of a main stockpile of 2.0 Mt and three immediately adjacent supplementary piles of up to 0.1 Mt (combined). The main pile will have a footprint of approximately 11 ha and a maximum height of 30 m; the smaller piles will have a combined footprint of approximately 2.7 ha and a maximum height of 10 m. All ore stockpiles are designed with slopes of 1.37H:1V. All dimensions are currently subject to ongoing engineering studies and detailed design.

In addition, a crushed ore stockpile will be located adjacent to the crusher, which will have live capacity for approximately 24 hours of storage (i.e., approximately 5,000 t) and will be continually cycled into the process plant. Material in this stockpile will consist of crushed ore from the ROM stockpile or the primary ore stockpile which has been processed through the crushing circuit and is ready for further processing.

4.7 Ore Processing

4.7.1 Facilities

Ore processing will be undertaken at the process plant area using standard technology for gold and copper recovery, consisting of:

- Crushing circuit
- Grinding circuit
- Gravity recovery
- Flotation
- Cyanidation
- Copper concentrate thickening and filtration

- Acid wash, desorption and regeneration
- Electrowinning and refining
- Cyanide destruction
- Tailings filtration
- Paste backfill.

Primary and secondary crushing facilities are situated separately to the north of the process plant, while the remaining circuits are contained within or immediately adjacent to the process plant facility. The overall layout is shown on the site plan in Figure 4.3-1.

4.7.2 Processing

The process plant has been designed consistent with typical copper and gold recovery circuits. Ore processing will occur at a nominal rate of 5,200 to 8,000 tpd, with an estimated plant utilization of 92%.

From the ore stockpile, ore will be transferred for sizing to a primary crusher and then to a secondary crusher by a covered conveyor. Once the ore is re-sized, it will be conveyed for temporary storage in a crushed ore dome, before being transferred to the process plant for gold and copper recovery. Although not currently planned, there is also the potential that the process plant could process ore trucked to the site from other compatible deposits at the same time as processing the Project ore, or potentially after the onsite ore resource is depleted. Development of other ore bodies to feed the Project process plant in the future (if any) and transport of ore, will be required to meet all federal and provincial regulatory processes at the time.

The crushing circuit receives ROM material. Processing methods will entail several stages of conventional mineral processing, such as: crushing, grinding, flotation, cyanidation and tailings filtration. The process plant has been designed to produce both doré bars and copper concentrate inside one building, using different equipment, chemicals and processes. These products will be periodically trucked to existing facilities off site for additional purification / refining. The final tailings of the process plant are filtered and sent to a paste backfill plant or trucked to the TSF.

The process includes the following circuits:

- **Crushing:** ROM ore is broken down to a size appropriate for processing via a grizzly for rock-breaking, then a jaw crusher to further reduce the material. From here it is stockpiled in a covered crushed ore storage. From the ore stockpile, ore will be transferred for sizing with the oversize material feeding a secondary crusher. The combined sized fines and crushed ore represent the main process plant feed.
- **Grinding:** Ore from the crushing circuit is fed to a two-stage grinding circuit comprised of a semi-autogenous grinding (SAG) mill and a ball mill in a closed circuit with hydrocyclones. The hydrocyclone overflow feeds the flotation circuit. The gravity separation circuit is a sub-section of the grinding circuit. It receives a portion of the flow from the ball mill discharge.
- **Copper flotation and recovery:** Material directed to this circuit is passed through steps of froth flotation with an intermediate regrinding stage for production of a final copper concentrate. The recovered copper concentrate is thickened, filtered and stored for

shipment offsite. Flotation circuit tailings are directed to the pre-leach thickener for introduction to the gold leaching circuit.

- Gold leaching and adsorption: The pre-leach thickener will adjust the slurry percent solids prior to leaching. Cyanide and lime will be added to the leach circuit for gold recovery. From the leaching tanks, slurry flows to a carbon-in-pulp (CIP) process where activated carbon will be used to recover dissolved gold from the leach solution.
- Carbon plant and gold recovery circuit: The loaded carbon from the CIP circuit will be processed to recover gold. Under the base case configuration, the loaded carbon may report to an acid wash vessel or directly to an elution column, where the gold will be stripped from the carbon using the pressure-Zadra process with a hot caustic solution. The gold is then recovered from the pregnant solution using electrowinning cells. Gold sludge removed from the stainless-steel cathodes will then be filtered, dried, and mixed with fluxing agents prior to being smelted in an induction furnace. Once smelted, the furnace contents will be poured into doré bars. The stripped carbon is regenerated and reintroduced into the CIP circuit, with new carbon material added as needed. The carbon plant and gold recovery circuit also comprises equipment to remove potential mercury from the exhaust streams. As an alternative configuration, and subject to the results of further studies, loaded carbon may be transported to and processed at an offsite processing facility in the region.
- Cyanide destruction: The remaining cyanide in the slurry from the CIP tailings is detoxified to destroy free and weak acid-dissociable cyanide. The reagents used in this process include sulphur dioxide (SO₂), oxygen, copper sulphate (CuSO₄) as a catalyst and lime for pH control.
- Tailings management: The discharge of the cyanide destruction is thickened using a high-rate thickener and then is dewatered using a pressure filter. The filtered tailings are sent to a paste backfill plant or trucked to a dry stacking area.

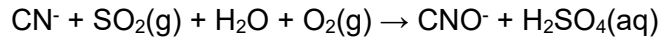
A schematic of the ore processing flowsheet is shown in Figure 4.7-1, with the layout of the process plant shown in Figure 4.7-2.

4.7.2.1 Cyanide Use and Destruction

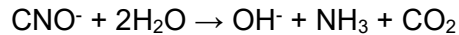
The use of cyanide as a reagent to leach gold from ore is a standard practice throughout the industry, including at other active gold mines in Ontario. Industry best practices are well-established and will be used. This includes transportation and storage of sodium cyanide to the site, expected to be transported as solid briquettes in sealed isotainers, as well as best practices during the mixing and use in the process plant, and in the destruction of cyanide components in tailings prior to storage in the TSF.

Cyanide in liquid form (as dissolved sodium cyanide) will be added to the leach circuit. Cyanide will be partially consumed during the leaching and carbon-in-pulp processes as a result of reactions with sulphur, oxygen and various metals. Some of the residual cyanide will also be recycled back to the plant process water system.

The primary by-product produced during ore processing is ore tailings from the CIP circuit which is treated for cyanide destruction. Cyanide destruction will use the SO₂ / air process, using liquid sulphur dioxide, copper sulphate and oxygen as reagents. Treatment of cyanide and metallo-cyanide complexes involves the following (or equivalent) reactions:



where the cyanide ion (CN^-) is oxidized to the cyanate ion (CNO^-) using copper as a catalyst. Cyanate then reacts with water (hydrolyzes) to form ammonia (NH_3) and carbon dioxide (CO_2) in accordance with the following reaction:



The target concentration of total residual cyanide in the tailings after the cyanide destruction will be in compliance with applicable regulations and the principles of the International Cyanide Management Code (ICMI 2021).

4.7.3 Tailings Production

The discharge of the cyanide destruction circuit is dewatered using a thickener and pressure filter up to approximately 85% solids by weight, to produce dewatered tailings. A portion of the final dewatered tailings are expected to be treated in the backfill plant for re-use in backfill underground and will not be stored on surface. The remaining dewatered tailings will be loaded into haul trucks for transport and placement in the TSF.

4.7.4 Tailings Geochemistry

Metallurgical testwork completed between 2019 and 2025 produced a series of tailings samples representing ore from different portions of the deposit and mine life. The tailings database includes desulphurized rougher tailings, recombined whole tailings, and multiple master composite tailings samples generated from metallurgical programs conducted in 2019, 2021, 2024, and 2025. A total of 10 tailings samples were subjected to static geochemical characterization, with selected samples also undergoing supernatant analysis and kinetic testing.

Tailings samples underwent acid-base accounting testing, including measurements of paste pH, sulphur content, carbonate neutralization potential, and Modified NP. Tailings are characterized as non-acid generating, with kinetic testing indicating circum-neutral conditions. The water management and monitoring programs will support the management of constituents that may be released under circumneutral pH conditions.

Elevated mercury concentrations were identified in supernatant, SFE, and kinetic test leachates from several tailings samples, most notably the unsaturated column leachate from tailings sample 18806-01. As a result, a focused investigation of mercury occurrence and leaching behaviour was undertaken for incorporation into water quality modelling and management planning. The detailed mercury investigation evaluated the geological distribution of mercury, relationships between solid-phase mercury abundance and leachability, particle-size effects, and the influence of ore processing and reagent additions. Results indicate that mercury leaching is controlled by multiple factors, including mineralogical associations and processing-related effects, and the results were incorporated into the water quality modelling.

To evaluate representative whole-tailings chemistry, sulphur concentrates were recombined with the desulphurized rougher tailings to generate whole-tailings blends representative of material expected to be discharged to the TSF. These recombined tailings samples underwent static geochemical characterization. Additional metallurgical programs completed in 2021, 2024, and 2025 generated further tailings samples that were subjected to both static and kinetic

testing, providing a more comprehensive characterization of tailings expected throughout the operations phase.

Overall, geochemical testing completed on tailings indicates that the materials are non-acid generating under the conditions evaluated. The mercury concentrations observed in selected tailings leachates prompted a focused investigation into mercury occurrence and leaching behaviour, the results of which have been incorporated into water quality modelling and management planning for the TSF. Tailings monitoring and management strategies are focused on constituents that may be released under circum-neutral conditions.

4.7.5 Reagent Transport, Storage and Use

A number of reagents are required for various uses on the Project site, such as ore processing, maintenance of vehicles and equipment, and water treatment. A preliminary listing of reagents and other materials required, including anticipated quantities and storage methods, is provided in Table 4.7-1. Industry-equivalent reagents are available in the market and could potentially be used. Consumption rates provided are approximate, based on test work as currently understood as well as operating practices at other existing process plants.

Where applicable, reagents will be mixed within containment areas to contain any spills, and storage tankage will be equipped with monitoring instrumentation and alarms.

Table 4.7-1: Process Plant Reagent Supply

Anticipated Reagent	Design Consumption (kg/t milled)	Delivery Method	Storage Area	Preferred Storage	
				Capacity	Days
Flocculant	0.070	Bulk bags	Reagents building	10 t	26
Hydrated lime	1.52	Bulk tanker	Outdoor silo	485 m ³	35
Sodium Cyanide	0.6	Bulk isotainer	Cyanide building	22 t	7
Collector (Aerophine 3418A)	0.05	Liquid tote container	Reagents building	25 t	10
Methyl Isobutyl Carbinol	0.02	Liquid tote container	Process plant	2 t	15
Leach Aid	0.00011	20-L container	Process plant	20 L	30
Caustic Soda	0.071	IBC	Reagents building	10 m ³	30
Activated Carbon (coconut shells)	0.1	Bulk bags	Reagents building	20 t	40
Grinding Media (SAG mill)	1.0	Bulk truck	Concentrator ball pit	125 t	25
Grinding Media (ball mill)	0.800	Bulk truck	Concentrator ball pit	100 t	25
Grinding Media (regrind mill)	0.10	Bulk truck	Concentrator ball pit	10 t	4
Hydrochloric Acid	0.061	Liquid tote container	Process plant	5 m ³	20
Liquid SO ₂	1.300	Bulk tanker	Outdoor tank	110 t	16
Sodium Metabisulfite	2	Bulk bags	Reagents building	To Be Confirmed ¹	To Be Confirmed
Copper Sulphate	0.07	Bulk bags	Reagents building	10 t	30
Oxygen	0.82	Bulk tanker	Outdoor tank	110 t	25
Antiscalant	0.001	Liquid drum	Process plant	200 L	40
Binder (Portland Cement)	40	Bulk truck	Outdoor silo	To Be Confirmed	To Be Confirmed
Chelating Agent (UNR74)	0.003 g / t	Liquid tote container	Process plant	6 T	28
Liquid CO ₂	1	Bulk tanker	Outdoor tank	150 t	25
Lead Nitrate	0.25	Bulk bags	Reagents building	To Be Confirmed	To Be Confirmed
Hydrogen Peroxide	To Be Confirmed	To Be Confirmed	Reagents building	To Be Confirmed	To Be Confirmed



Anticipated Reagent	Design Consumption (kg/t milled)	Delivery Method	Storage Area	Preferred Storage	
				Capacity	Days
Silicate	To Be Confirmed	To Be Confirmed	Reagents building	To Be Confirmed	To Be Confirmed

Note:

- Values identified as to be confirmed will be finalized during detailed engineering. The Impact Statement assessment considers the anticipated use, storage, handling, transportation, containment, spill prevention, and emergency response requirements for process reagents and related materials based on the current Project design. Final storage quantities and storage durations will be confirmed prior to construction and will be managed in accordance with applicable regulatory requirements, supplier specifications, and site-specific management plans.

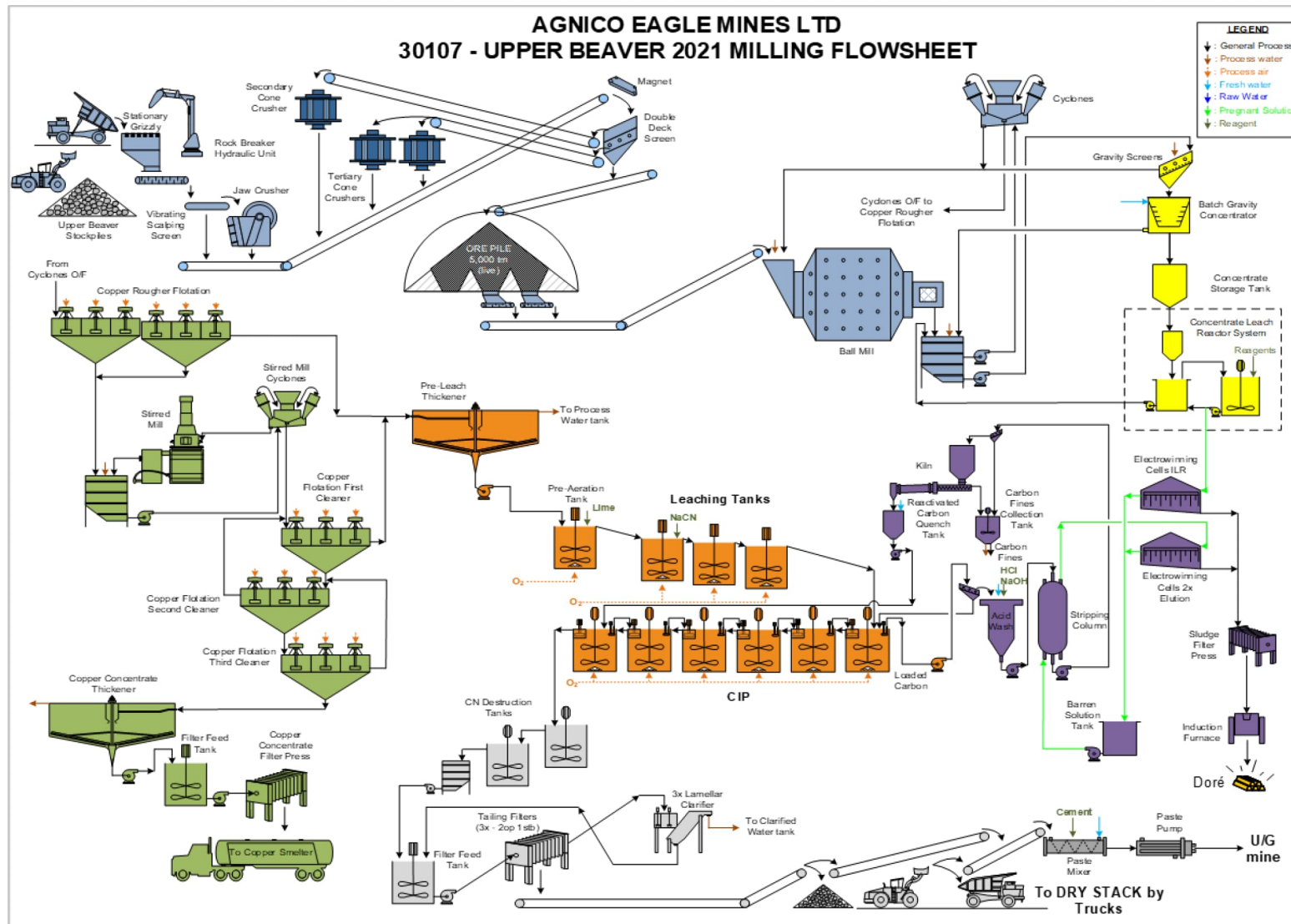


Figure 4.7-1: Simplified Upper Beaver Milling Flowsheet

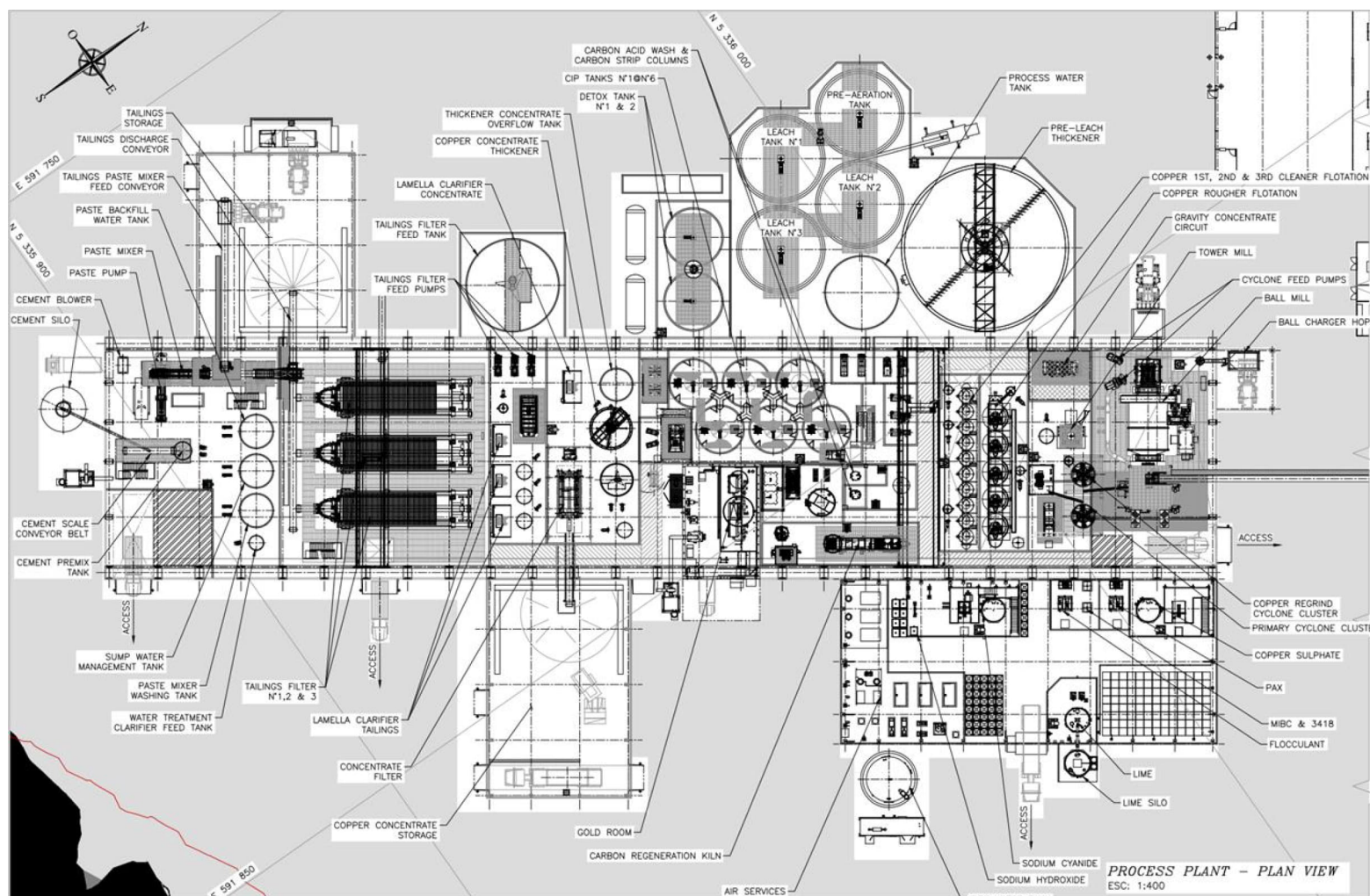


Figure 4.7-2: General Arrangement Drawing of the Upper Beaver Mill

4.8 Tailings Storage Facility

4.8.1 Design

Subject to ongoing engineering and detailed design, the TSF will be constructed in three phases over the mine life and will have an ultimate footprint of approximately 134 ha, providing capacity for the approximately 12.6 Mt of tailings and 5.7 Mm³ of mine rock which will require surface storage. The facility has been designed to have capacity for an additional 17 Mt of tailings. The layout of the TSF is shown in Figure 4.8-1.

As described in Section 4.5.4, the tailings will be filtered at the process plant to approximately 85% solids by weight and trucked to the TSF for placement (dry stacking).

A number of geotechnical site investigations have been undertaken across the Project site from 2018 to 2026. The investigation types include boreholes (BH), monitoring wells (MW), test pits (TP) and seismic cone penetration tests (SCPT) in the proposed TSF. In 2019, the TSF was covered with a program of 18 TP, while a 2020 TSF program included 24 TP, 9 BH, 4 MW and 9 shallow piezometers. The 2021 program covered the footprint with 8 TP and in 2022 two site investigations covered the TSF with 7 MW and 13 TP. The TSF was investigated in 2024 with 3 BH, 9 TP, 1 MW and 4 SCPT. In 2025, the area was investigated with 20 BH, 28 TP and 12 SCPT. Overburden thicknesses in the area are variable, indicated as ranging from less than 1 m to approximately 38 m.

The TSF and associated appurtenances will be designed and operated in accordance with applicable industry-wide safety and stability requirements, considering the applicable principles of the Global Industry Standard on Tailings Management (ICMM 2020) and the Canadian Dam Association guidelines (CDA 2013; CDA 2019). The Canadian Dam Association guideline dam hazard classifications range in severity including low, significant, high, very high and extreme. In applying these guidelines to the TSF for the Project, a classification of significant has been assessed (Knight Piésold, 2024).

As the tailings will be placed in a dry stack configuration with limited water to be managed, the facility will not have an internal pond or associated dams. The facility will have an ultimate crest elevation that varies between 350 and 358 masl, with a maximum height of 45 m along the north side and 65 m along the south side. Slopes will vary from 4H:1V to 8H:1V according to the foundation conditions (sand, silty clay, bedrock).

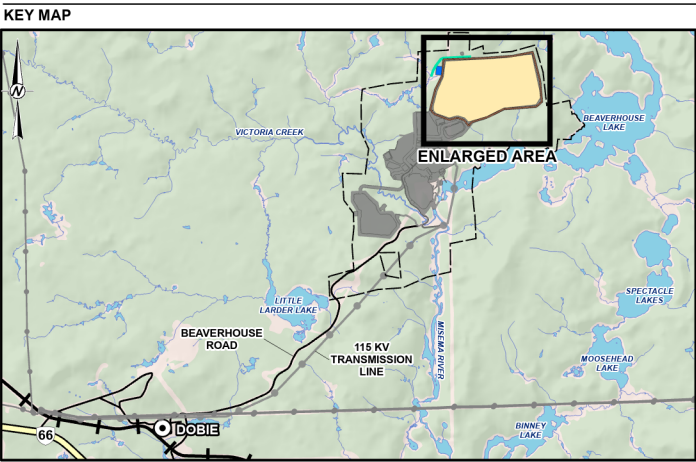
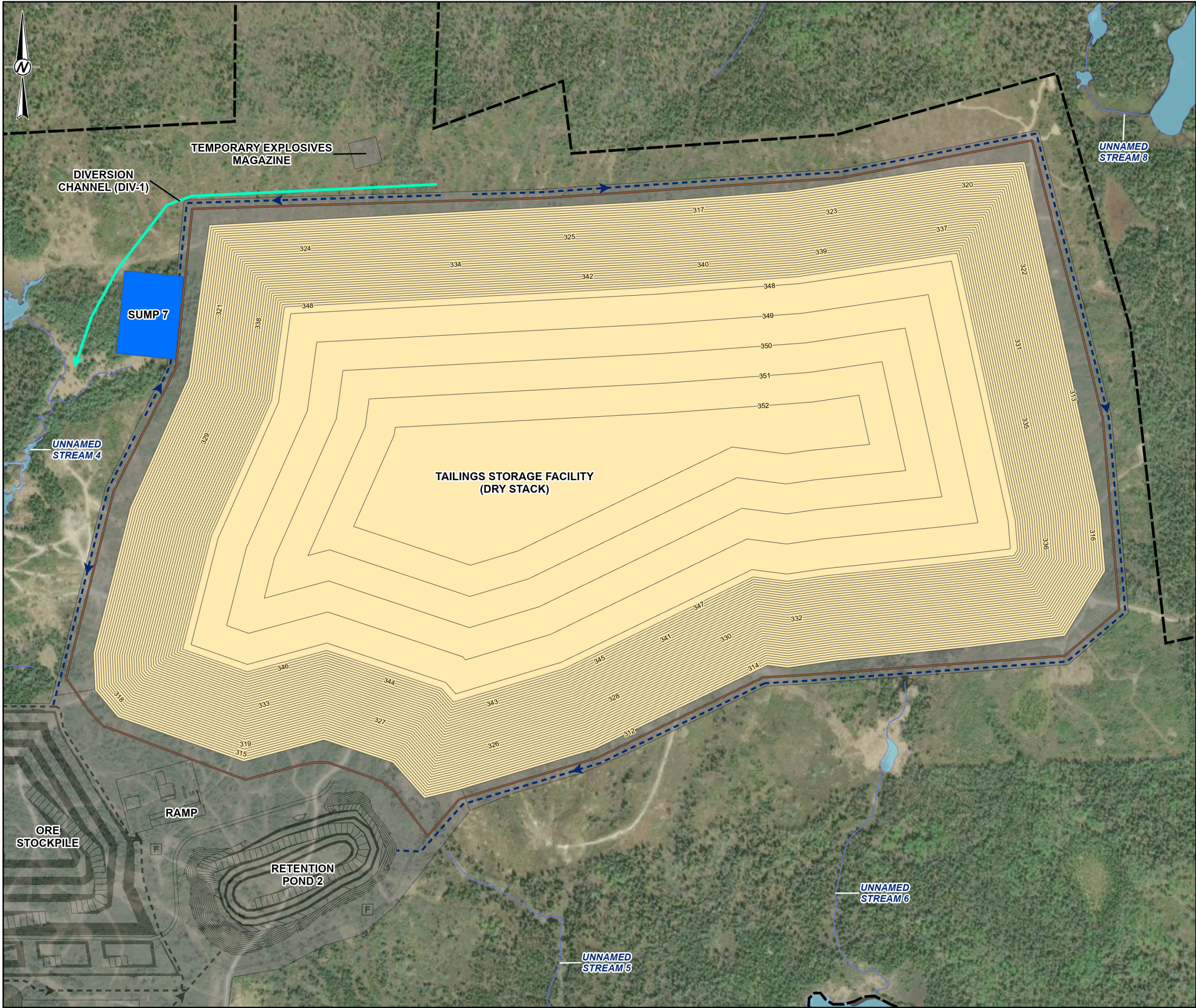
4.8.2 Construction

During the construction phase of the Project, the footprint for the TSF will be cleared as required to support construction activities, including foundation preparation, and grading to promote drainage to the underdrain system. The material stripped will be transported to the Overburden Stockpile for storage or stored locally for use in construction or subsequent reclamation. Lining of the TSF is not proposed because seepage through the dry stack TSF is expected to be limited by the facility design (Appendix F-1). In addition, the geochemical characteristics of the materials to be stored in the TSF do not indicate a need for liner-based management of acid rock drainage or metal leaching, given the low proportion of PAG material and the high neutralization potential of the stored materials (Section 4.5.5.).

4.8.3 Operation

Tailings and mine rock will be trucked to the TSF using mine haul trucks and placed using equipment such as a bulldozer and compactor within the TSF. Development of the stack is proposed to take place in three phases, with the central portion of the area being established first, followed by the western and then eastern portions of the area. Mine rock which has been identified as PAG will consist of approximately 0.7 Mm³, representing 4% of the material stored in the facility. This quantity represents the portion of PAG mine rock that will require surface storage in the TSF. The remaining PAG mine rock will be managed underground as backfill and therefore is not included in the volume of PAG material stored in the TSF. As a result, the approximately 0.7 Mm³ of PAG mine rock stored in the TSF represents approximately 4% of the total material stored in the facility, including tailings and mine rock, whereas the approximately 11% value presented in Section 4.6.2 refers to the proportion of mine rock classified as PAG before accounting for underground backfill placement. This material will be handled in accordance with an ML / ARD management plan which will be developed to provide guidance on material management to mitigate the potential for issues associated with PAG materials. Measures are expected to consist of encapsulation by NPAG tailings and mine rock, reducing the exposure of it to oxygen and inhibiting the onset of acidic drainage. As the TSF is developed, an outer rockfill shell approximately 1 m in thickness will be placed over a non-woven geotextile layer as required to mitigate erosion and fugitive dust emissions. To reduce the permeability of the facility and decrease infiltration, tailings will be compacted following placement and graded to promote drainage to the perimeter for collection in the runoff collection system.

Runoff from the facility will be collected in a perimeter ditching system, while an internal underdrain system will collect seepage within the facility and direct it to the perimeter ditching. Runoff and seepage will be directed to Retention Pond 2 for further management as part of the integrated water management system. The predicted seepage quantities and collection system efficacy for the TSF is described further in Appendix F-2.



SCALE: 1:120,000

LEGEND

PROPERTY BOUNDARY

WATERCOURSE

WATERBODY

PROPOSED SITE FEATURE

TAILINGS STORAGE FACILITY

POND / SUMP

TAILINGS STORAGE FACILITY ACCESS ROAD

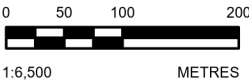
TAILINGS STORAGE FACILITY DITCH

DIVERSION CHANNEL

OTHER SITE FEATURE

VENTILATION RAISE FRESH AIR INTAKE

DITCH



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. IMAGERY CREDITS: SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. SITE PLAN, PROPERTY BOUNDARY AND 115 KV TRANSMISSION LINE PROVIDED BY AGNICO EAGLE, FEBRUARY / DECEMBER 2025.
4. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
AGNICO EAGLE MINES

PROJECT
UPPER BEAVER GOLD PROJECT

TITLE
TAILINGS STORAGE FACILITY LAYOUT

CONSULTANT	YYYY-MM-DD	2026-06-25
	DESIGNED	----
	PREPARED	MD
	REVIEWED	----
	APPROVED	----



PROJECT NO. CA0042150.6518	CONTROL 0012	REV. A	FIGURE 4.8-1
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4.9 Buildings, Other Facilities and Onsite Infrastructure

The following permanent facilities are planned for the Project and may consist of reusing existing AEX facilities, or developing new structures designed for longer term usage:

- Process plant and crushers building with conveying system
- Tradeshop / maintenance, warehouse, core shack, laboratory, outbuildings and laydown areas
- Offices
- Explosives storage facilities.

These will be supported by related piping and power infrastructure as needed. A preliminary listing of the buildings to be developed to support the Project is provided in Table 4.9-1. The approximate locations are shown in Figure 4.3-1.

The preliminary site layout has been developed to take advantage of the AEX Program buildings and facilities in order to minimize land disturbance, account for existing geotechnical conditions, and to provide adequate setbacks from existing watercourses where practical. Final setback distances will be determined during detailed engineering design. The primary goal of the layout has been to provide efficient operating conditions with a compact footprint and to minimize overall environmental effects. Lighting will be provided as appropriate to facilitate a safe working environment.

The process plant location has been placed to avoid potential ore resources, and where geotechnical investigations indicate the presence of bedrock at or near the surface. Exterior and interior tankage will be designed to capture spillage that may occur, avoiding an uncontrolled release to the environment. Special equipment and handling procedures will be implemented to maintain safe use and storage of cyanide and other reagents.

The tradeshop / maintenance will allow indoor maintenance on heavy equipment. Wash bay(s) will be present in order that trucks and other equipment can be washed to allow effective maintenance and extend equipment life. Wash water will be captured and treated. A warehouse may also be established.

Explosives needed for open pit and underground mining (and potentially for site preparation / diversion construction) will be prepared by a contractor and delivered to site under their care and control as required. As a result, only an explosives storage area (on surface and underground) will be required on site. The location of any explosives-related facility on site will follow all federal regulatory guidance, including as related to siting (BNQ 2015).

The core shack will be used to manage drill core from the mine before samples are sent to the lab. It will be equipped with multi-level shelving to maximize the space for core sample storage. A core saw, dust collectors and typical core shack equipment will be installed in the building.

A laboratory may be established on site for characterization of mine materials for waste management, as well as for ore assays. If a laboratory is set up, it is anticipated that it would be situated within the process plant area.

A network of access and haul roads will be established within the site as needed, utilizing the existing road network or road network developed during the advanced exploration as reasonable (Figure 4.3-1). Any new roads will be constructed of NPAG mine rock or aggregate.



The requirement for new water crossings has been minimized and only a new, clear-span bridge across Victoria Creek will be required. Existing water crossings along Beaverhouse Road may also require upgrading to accommodate all traffic to and from the site. Internal culverts may be required within the confines of the site to allow for the movement of runoff to the water management system.

Table 4.9-1: Preliminary List of Buildings

Item	Description
Primary Crusher Building	• Pre-engineered, enclosed steel frame metal clad building • 85 t overhead crane, 17 m span
Grinding Building	• Pre-engineered, steel frame metal clad building • 60 t SAG mill overhead crane • 45 t ball mill overhead crane
Process Building	• Pre-engineered, steel frame metal clad building • 25 t regrind mill overhead crane • 25 t regrind / flotation overhead crane
Stockpile Building	• Pre-engineered, fabric clad dome building
Gold Room	• Pre-engineered, steel frame metal clad building
Tailings Filtration Building	• Pre-engineered, steel frame metal clad building
Reagent Building	• Pre-engineered, steel frame metal clad building • 7.5 t overhead crane
Administration / Dry	• Pre-engineered and modular building • Offices and change rooms (dry)
Mine Offices	• Pre-engineered and modular building • Office and mine rescue room with equipment
Warehouse / Workshops	• Pre-engineered, steel frame fabric clad building • For maintenance of equipment and storage of equipment parts
Gatehouse	• Modular building
Laboratory	• Modular building • Onsite assaying, metallurgical and environmental testing
Tire Change Shop	• Pre-engineered, steel frame fabric clad building • Primarily mine haul fleet tire maintenance
Truck Shop	• Pre-engineered, steel frame metal clad building • Two, 25 t overhead cranes • Separate sections for warehousing and maintenance workshop
Vehicle Wash-Bay	• Pre-engineered, steel frame fabric clad building • Contains fluid-collection sump and oil-water separator • Wash water expected to be re-used
Fuel Depots	• Light vehicle and mine fleet diesel supply (4 x 50,000 litres [L]) and dispensing facilities • Other minor fuel types of storage
Explosives Storage Magazine	• Designed in accordance with current applicable regulations • On surface and underground storage required

4.10 Fisheries Offset and Compensation Measures

Where practicable, efforts have been made to design the Project to minimize direct overprinting or indirect effects (i.e. flow reductions) to aquatic habitat. Given that the ore body underlies York Lake, as well as the presence of a number of other watercourses and waterbodies in the area, complete avoidance of fish habitat is not feasible.

Mitigation measures to address the potential effects to fish and fish habitat are described in Section 10, and will be implemented in accordance with the *Fisheries Act* regulations and policies, in a manner similar to most other mining projects in Canada.

During the life of mine, approximately 10 ha of fish habitat is anticipated to be affected. Through a combination of reclaimed habitat at closure, and structural enhancements, there will be an overall net benefit to fish and fish habitat in the system. Fish habitat overprinted during life of mine will require either a Schedule 2 listing under the Metal and Diamond Mining Effluent Regulations (MDMER) or authorization under Paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act*. A draft Fisheries Offsetting and Compensation Plan (WSP 2025) is provided in Appendix J.

In order to address the stability issue resulting from the historical mine workings, an open pit and diversion system will be implemented as described in Section 4.4, where water flowing from Misema River into York Lake will be diverted around the area to maintain connectivity to downstream reaches. As a result, the effects to fish habitat arising from development of the Project include the overprinting of portions of York and Ava Lakes for the development of the open pit and the associated Misema River diversion system. In addition, fish habitat will be affected due to the overprinting of unnamed tributaries to Beaverhouse Lake and Victoria Creek for the construction of the TSF, overprinting an unnamed tributary to Beaverhouse Lake for the construction of the process plant, and overprinting an unnamed tributary to Victoria Creek for the development of Sump 4. Effects are also anticipated to include instream flow reductions associated with unnamed tributaries to Victoria Creek and Beaverhouse Lake, downstream of the process plant and TSF.

The offset and compensation measures presented in the draft Fisheries Offsetting and Compensation Plan have been reviewed and discussed with regulators and Indigenous Nations. It is expected that additional adjustments to offsetting and compensation measures under the *Fisheries Act* may be evaluated and made part of the final plan during the permitting process. However, the draft plan demonstrates that there are several opportunities available to meet or exceed regulatory requirements and ultimately increase overall fish habitat and productivity.

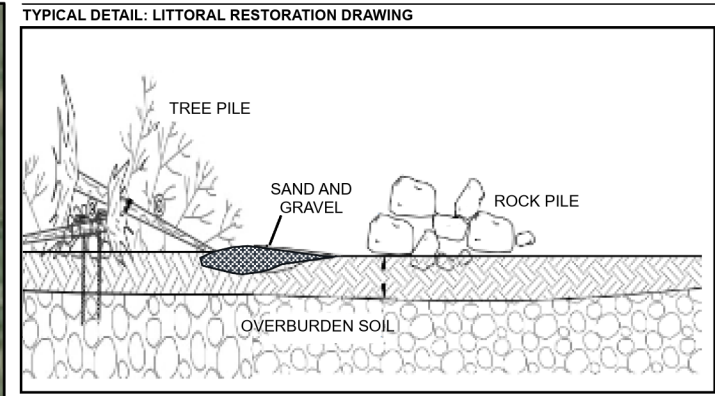
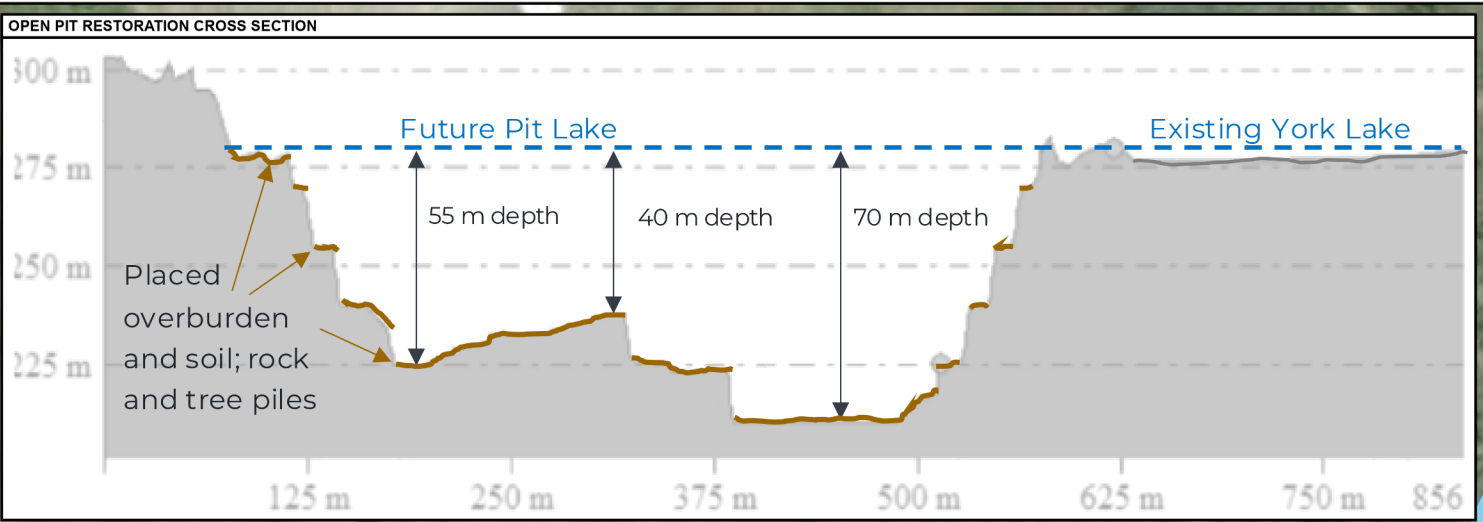
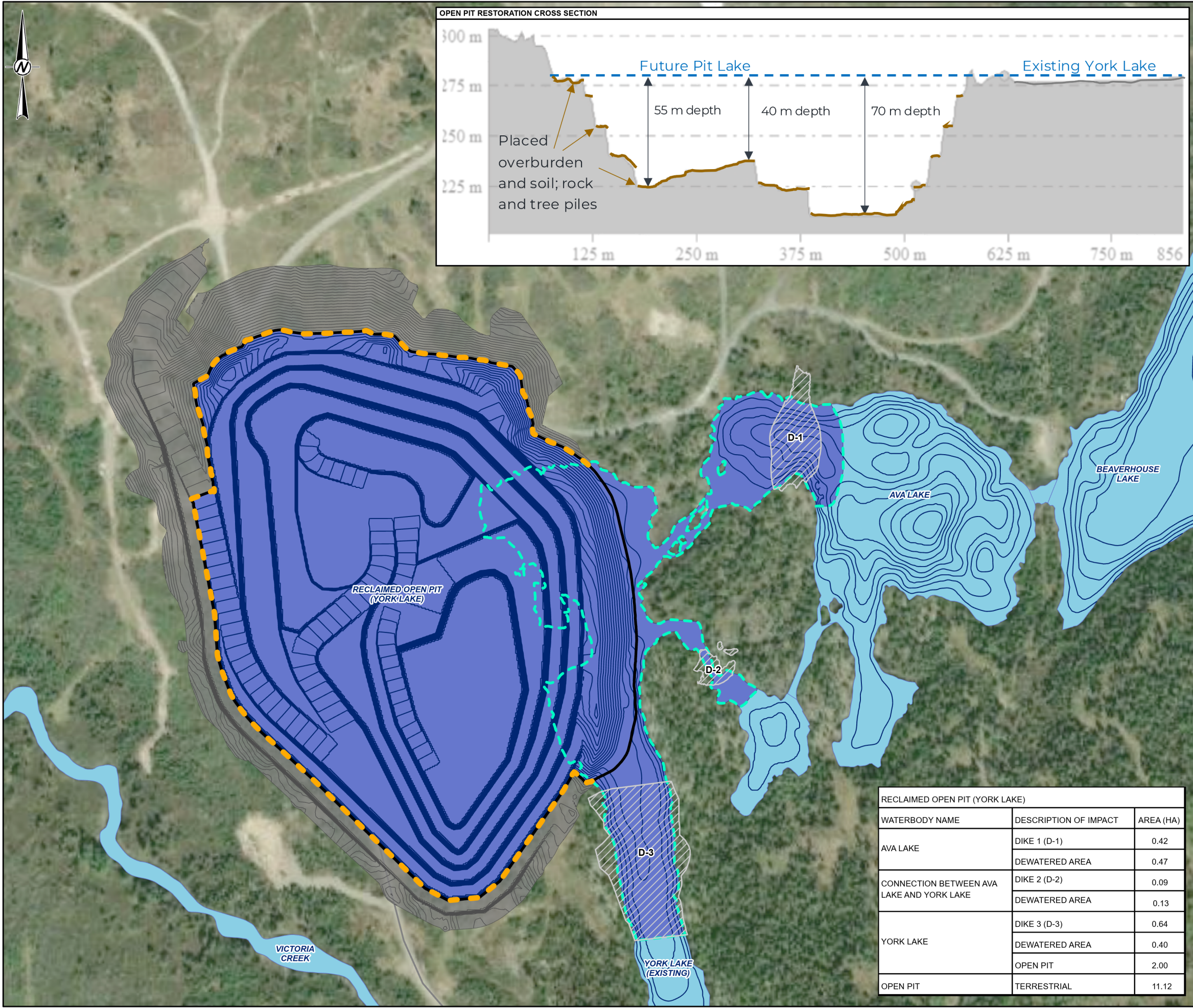
Three candidate measures were selected as preferred measures for offset and compensation which include:

- Reclamation of York Lake
- Structure Enhancement (Beaverhouse Lake)
- Structure Enhancement (Larder Lake).

Details of the implementation of each of these measures are provided in Appendix J. A summary of the extent of effects and the corresponding offset and compensation area is provided in Table 4.10-1, and the proposed offset and compensation measures for York Lake, Beaverhouse Lake and Larder Lake are shown in Figure 4.10-1, Figure 4.10-2 and Figure 4.10-3, respectively.

Table 4.10-1: Fish Habitat Offsetting and Compensation Area Accounting and Balance Summary

Description	Potential Area of Effects (ha)	Calculated Offset / Compensation Area (ha)
Combined Schedule 2 potential effects	1.4	-
Combined Paragraph 35 potential effects	10.8	-
York Lake	-	14.2
Beaverhouse Lake	-	3.3
Additional sites in Beaverhouse Lake and/or other lakes	-	5.9
Larder Lake	-	0.5
Summary	12.2	23.9
Net Difference	-	11.7
Net Ratio	-	2.0:1



LEGEND

- OPEN PIT
- FILLED OPEN PIT
- DYKE (REMOVED AT CLOSURE)
- DEWATERED AREA (DURING OPERATIONS)
- RECLAIMED OPEN PIT (YORK LAKE) (591805E, 5335510N)
- POTENTIAL LITTORAL RESTORATION
- LOCAL ROAD
- BATHYMETRY CONTOURS (1 M INTERVAL)
- WATERBODY

0 25 50 100
1:3,250 METRES

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. BATHYMETRY INFORMATION BASED ON DATA PROVIDED BY STORY ENVIRONMENTAL, 2021.
3. IMAGERY CREDITS: SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
4. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
AGNICO EAGLE MINES

PROJECT
UPPER BEAVER GOLD PROJECT

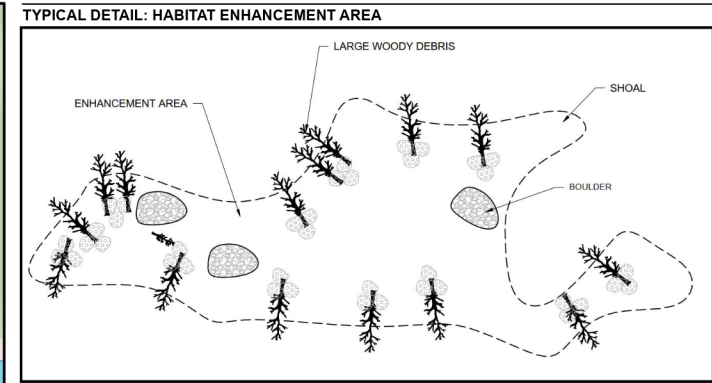
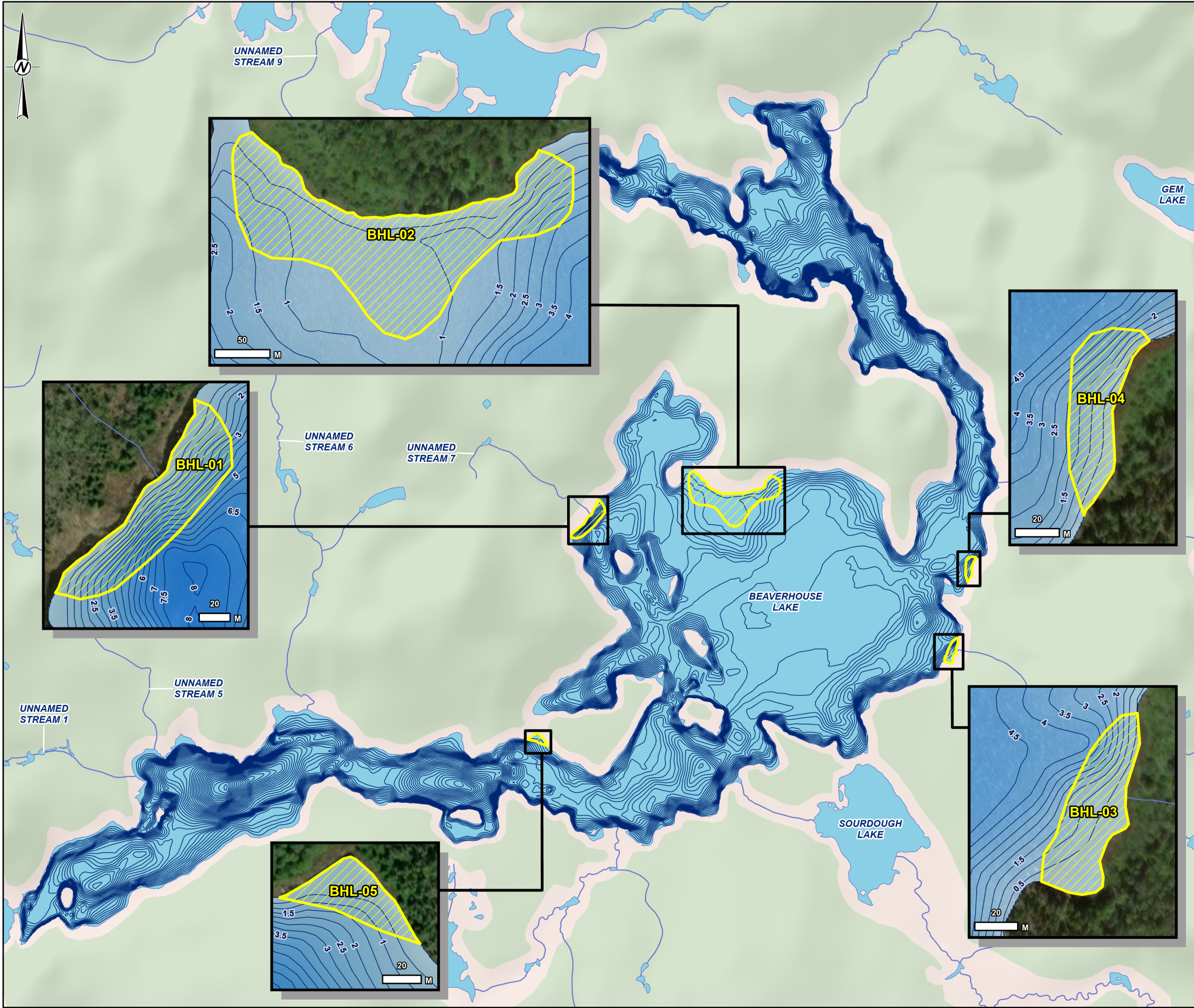
TITLE
FISH HABITAT OFFSETTING AND COMPENSATION - YORK LAKE

CONSULTANT

YYYY-MM-DD	2026-06-25
DESIGNED	----
PREPARED	MD
REVIEWED	----
APPROVED	----

PROJECT NO. CA0042150.6518 **CONTROL** 0012 **REV.** A **FIGURE** 4.10-1

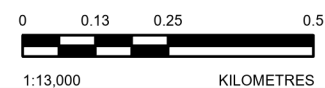
RECLAIMED OPEN PIT (YORK LAKE)		
WATERBODY NAME	DESCRIPTION OF IMPACT	AREA (HA)
AVA LAKE	DIKE 1 (D-1)	0.42
	DEWATERED AREA	0.47
CONNECTION BETWEEN AVA LAKE AND YORK LAKE	DIKE 2 (D-2)	0.09
	DEWATERED AREA	0.13
YORK LAKE	DIKE 3 (D-3)	0.64
	DEWATERED AREA	0.40
	OPEN PIT	2.00
OPEN PIT	TERRESTRIAL	11.12



LEGEND

- HABITAT STRUCTURE ENHANCEMENT AREA (BEAVERHOUSE LAKE)
- WATERCOURSE
- WATERBODY
- BATHYMETRY CONTOURS (0.5 M INTERVAL) (LABELLED WITH DEPTH BELOW SURFACE, M)

HABITAT STRUCTURE ENHANCEMENT AREA ID	EASTING	NORTHING
BHL-01	594245	5336917
BHL-02	594730	5336954
BHL-03	595460	5336478
BHL-04	595520	5336761
BHL-05	594067	5336190



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. BATHYMETRY INFORMATION BASED ON DATA PROVIDED BY STORY ENVIRONMENTAL, 2021.
3. BASE MAP: VANTOR
4. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
AGNICO EAGLE MINES

PROJECT
UPPER BEAVER GOLD PROJECT

TITLE
FISH HABITAT OFFSETTING AND COMPENSATION - BEAVERHOUSE LAKE

CONSULTANT	YYYY-MM-DD	2026-06-25
DESIGNED	----	
PREPARED	MD	
REVIEWED	----	
APPROVED	----	

PROJECT NO. CA0042150.6518	CONTROL 0012	REV. A	FIGURE 4.10-2
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4.11 Water Management and Treatment Facilities

4.11.1 Water Management

The underground mine will intercept groundwater, while the open pit will collect groundwater, runoff and direct precipitation. To support mine operations, Agnico Eagle proposes to expand the water management system established during the AEX Program. This would include repurposing Retention Pond 1 to function as the process water pond during the operations and constructing Retention Pond 2 as the primary contact water storage facility for the Project.

Contact water generated by mine operations, including runoff from mine-related facilities, open pit inflows, and water collected in contact water ditches and ponds, will be managed through the integrated site water management system. Retention Pond 2 will serve as the primary contact water storage basin and will receive contact water from across the mine site, including runoff from the mine footprint, contact water collection systems, open pit inflows, and, during extreme events, underground workings and mine sumps.

Retention Pond 1 will function primarily as the process water pond. It will receive underground dewatering inflows and selected pumped flows from Contact Water Pond 1 and will supply water to the process plant and effluent water treatment plant (EWTP). As an isolated pond, Retention Pond 1 will also provide contingency storage capacity to manage cyanide upsets within the milling process, reducing the potential for the release of cyanide-bearing water to the broader site water management system.

The Retention Ponds are designed with sufficient capacity to support the water management requirements, including environmental design floods, allowances for climate change, as follows:

- Retention Pond 1: 2 x 1:100-year, 24-hour precipitation, including 100% runoff and daily average snowmelt
- Retention Pond 2: 1:100-year, 24-hour precipitation for the Project site, assuming 100% runoff.

Contact water in the integrated site water management system will be collected for storage, re-use, treatment and discharge to the environment in accordance with applicable regulatory requirements, as needed.

Process water will be primarily sourced from recirculation from the integrated water management system, specifically from Retention Pond 1, with some additional water sourced from Retention Pond 2. Additional make up water may be required for ore processing, dust suppression, reagent mixing, domestic, and a fire water supply and will be pumped from a location at Ava Lake. Potable water is planned to be supplied in bottles or other containers, therefore a potable water treatment plant is not planned to be installed. Additional domestic water sources such as at the mine dry and in washroom facilities will be clearly marked as non-potable.

4.11.2 Effluent Water Treatment Plant

Contact water on the site, including surface runoff, mine water from dewatering, and collected seepage will be treated in the EWTP prior to final discharge to the environment. This process is separate from the cyanide destruction and metal reduction that will occur within the process

plant and the natural physical and chemical processes that will occur within the site ditching and ponds.

The EWTP will produce an effluent quality appropriate for discharge to the environment in accordance with applicable regulatory requirements, including the MDMER, and the effluent concentrations required by the Ministry of the Environment, Conservation and Parks to protect the receiving water and aquatic resources. Best available technologies that are economically achievable will be considered for the EWTP to meet protection requirements.

The EWTP used for the AEX Program is intended to treat contact water for metals and total suspended solids prior to discharge into the environment and will continue to be used into the construction phase with a subsequent upgrade for suitability during the operations phase of the Project (Figure 4.11-4).

The construction phase water management will include:

- Water pre-treatment for settling of suspended solids in Retention Pond 1
- Pumping effluent from Retention Pond 1 to the EWTP
- EWTP:
 - pH adjustment to precipitate metal
 - Addition of coagulant
 - Addition of metal precipitator
 - Addition of flocculant
 - Clarification separation
 - Polishing filtration
 - Sludge thickening in geotextile bags (this sludge will either be disposed of within the TSF or sent offsite to an approved site by a licenced waste hauler).
 - pH adjustment via acidification, if required
 - Pumping of the treated effluent to the final discharge location (Misema River).

The anticipated types and quantities of reagents to be used at the EWTP are shown in Table 4.11-1. These reagents will be stored in the EWTP area.

During operations, a nitrification reactor such as a moving bed biofilm reactor (MBBR) or alternative, may be added to manage ammonia in the effluent, with pre-treatment if required. The additional stages to the EWTP will include:

- Copper pre-treatment, if required
- Ammonia treatment
- Sludge thickening.

4.11.3 Effluent Discharge

Effluent discharges from the Project will be in accordance with all applicable regulatory requirements:

- During the construction phase of the Project, treated effluent will be discharged from the EWTP to a location on the Misema River downstream of the proposed open pit by way of an approximately 1500 m pipeline that was established for the AEX Program.
- Operations phase (and active closure phase) effluent from the EWTP will be discharged to a location on Beaverhouse Lake via a new, approximately 2000 m long pipeline.

These treated effluent discharge locations are shown on the site plan in Figure 4.3-1. At both locations, a diffuser will be used to support rapid initial mixing of effluent with surrounding water.

4.11.4 Water Balance

A site-wide water balance was completed to estimate the quantity of water expected to be managed throughout the operational, active closure, and post-closure phases of the Project. The water balance model considers precipitation, runoff, groundwater inflows, evaporation, seepage from Project infrastructure, and process water consumption.

Nine modelling scenarios were evaluated representing average, wet, and dry climatic conditions for the operational, active closure, and post-closure phases. These scenarios were developed to evaluate the performance of the site water management system across the range of hydrologic conditions anticipated throughout the Project life (Figure 4.11-1, Figure 4.11-2 and Figure 4.11-3).

Across all phases and scenarios, inflows to the Project are primarily driven by precipitation and groundwater inflows. Water management requirements evolve over time in response to changes in site infrastructure, mining activities and closure conditions. As the Project will be producing a filtered tailings stream, no supernatant pond is present within the TSF. Contact water generated from the TSF and other mine site facilities is collected and managed through the site water management system, with treatment provided where required prior to discharge.

During operations, contact water collected across the site is treated at the EWTP prior to discharge to Beaverhouse Lake (Figure 4.11-1). Average annual treated water discharge volumes are estimated at 2,906,890 m³/year, 2,066,761 m³/year, and 3,619,816 m³/year under average, dry, and wet climate conditions, respectively. Freshwater withdrawals required to support site operations are estimated at 337,786 m³/year.

During the active closure phase, water collected on site continues to be managed and treated, as required, prior to discharge to Beaverhouse Lake (Figure 4.11-2). Average annual treated water discharge volumes are estimated at 2,880,728 m³/year, 986,834 m³/year, and 3,529,105 m³/year under the average, dry, and wet climate conditions, respectively.

The post-closure site-wide water balance incorporates projected climate change conditions and reflects the long-term transition from active water management and treatment to passive reclamation and environmental discharge (Figure 4.11-3). Following the establishment of acceptable water quality conditions within the open pit lake, water will be discharged to the Misema River in accordance with the approved closure strategy. Average annual open pit lake discharge volumes are estimated at 120,452 m³/year, 46,069 m³/year, and 198,329 m³/year under average, dry, and wet climate conditions, respectively.

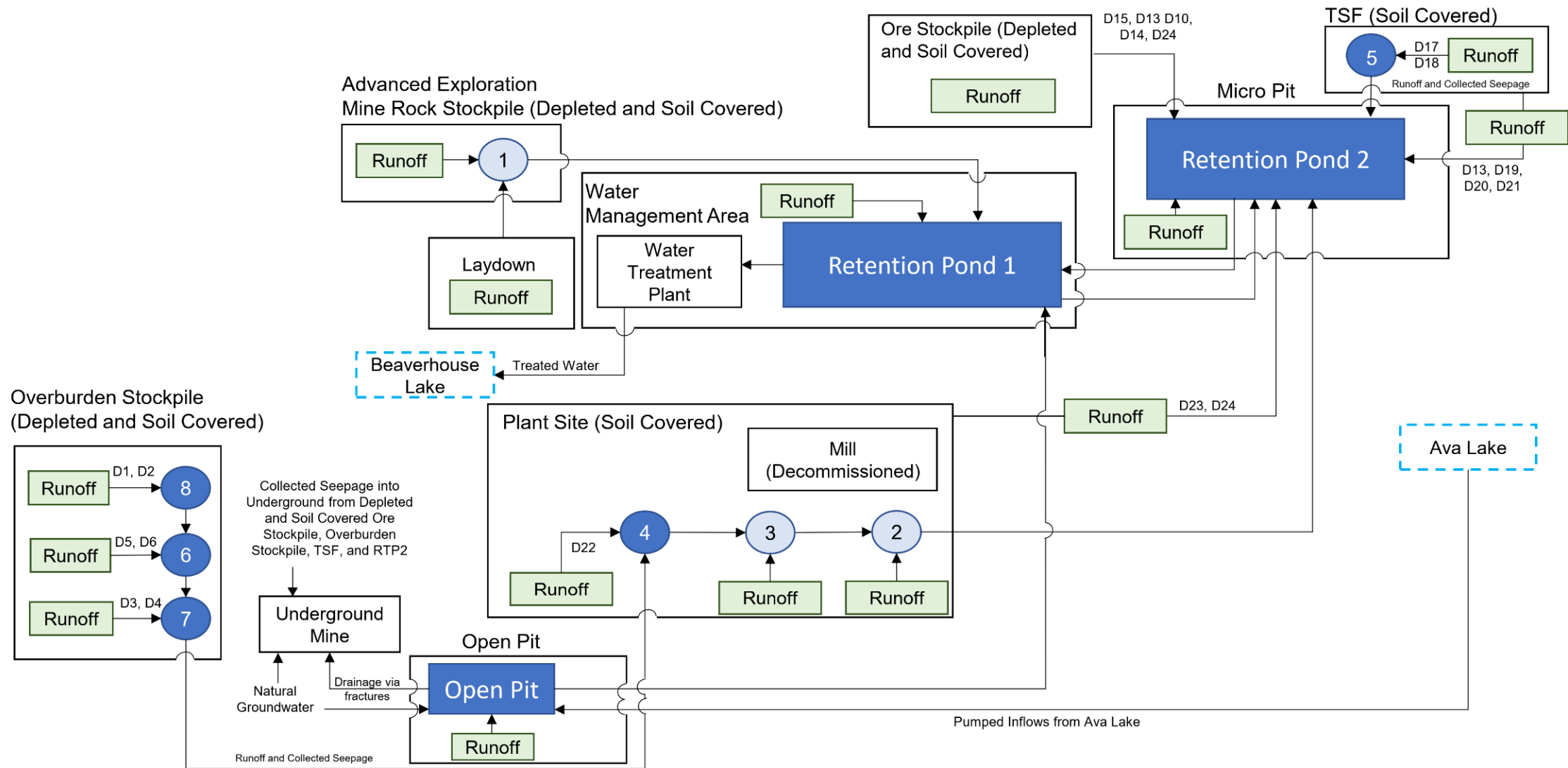
In addition, water stored within Retention Pond 2 will be discharged to Beaverhouse Lake via Unnamed Stream 5 as part of the long-term site drainage system. Average annual Retention

Pond 2 discharge volumes are estimated at 348,271 m³/year, 189,128 m³/year, 484,589 m³/year under average, dry, and wet climate conditions, respectively.

Table 4.11-1: Anticipated Types and Quantities of Reagents used in the EWTP

Reagent	Tank / Tote Volume	Delivery Method
Coagulant (Ferric sulphate)	Tank of 50 m ³	Bulk delivery (trailer tanker)
Acid (Sulphuric Acid)	1,000 L tote tank	Tote 1,000 L delivered by truck
Alkali (Caustic blend)	Tank of 50 m ³	Bulk delivery (trailer tanker)
Clarification polymer (Anionic)	20 kg bags	Truck – pallet of 1 t delivered by truck
Actisand	20 kg bags	Truck – pallet of 1 t delivered by truck
Thickening polymer (Cationic)	200 L drum	200 L, delivered by truck
Metal precipitator (Sodium Sulphide)	1,000 kg bag (solid)	Big bag 500 to 1,000 kg delivered by truck
Anto-scale	1,000 L tote tank	Tote 1,000 L delivered by truck
Anti-foam	1,000 L tote tank	Tote 1,000 L delivered by truck
Phosphorus Source	1,000 L tote tank	Tote 1,000 L delivered by truck
Chemical for CIP (filter and heat exchanger), including: • Citric acid • Sodium hypochlorite • Acid / base derivate product	20 kg bags (solid) or 1,000 L tote or 200 L drum or 20 L pails Used occasionally	Delivered by truck on pallet

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LEGEND

- Contact Water Ponds (CWP)
- Contact water ponds (Advanced Exploration) (CWP)
- Pond
- Runoff
- Mine Infrastructure
- Natural Water Body
- Flow Direction

CLIENT
AGNICO EAGLE MINES

PROJECT
UPPER BEAVER GOLD PROJECT

TITLE
WATER MANAGEMENT SCHEMATIC - ACTIVE CLOSURE

CONSULTANT	YYYY-MM-DD	2026-07-20
DESIGNED	---	---
PREPARED	MD	---
REVIEWED	---	---
APPROVED	---	---



PROJECT NO.
CA0042150.6518

CONTROL
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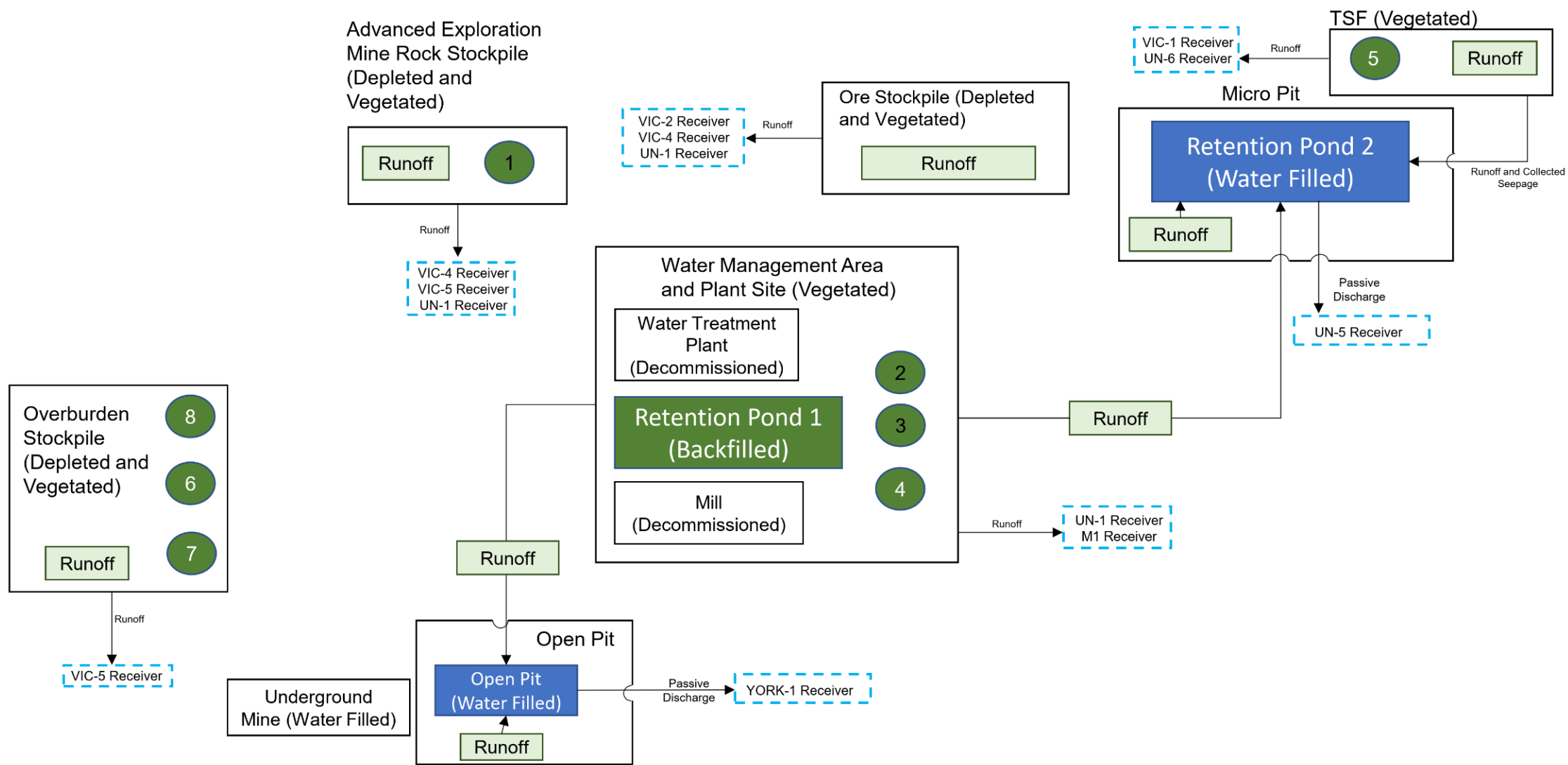
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FIGURE
4.11-2

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LEGEND

- Backfilled/Revegetated Contact Water Ponds (CWP)
- Pond
- Runoff
- Mine Infrastructure
- Natural Water Body
- Flow Direction

CLIENT AGNICO EAGLE MINES			
PROJECT UPPER BEAVER GOLD PROJECT			
TITLE WATER MANAGEMENT SCHEMATIC - PASSIVE CLOSURE			
	CONSULTANT	YYYY-MM-DD	2026-07-20
	DESIGNED	---	---
	PREPARED	MD	---
	REVIEWED	---	---
	APPROVED	---	---
PROJECT NO. CA0042150.6518	CONTROL 0012	REV. A	FIGURE 4.11-3

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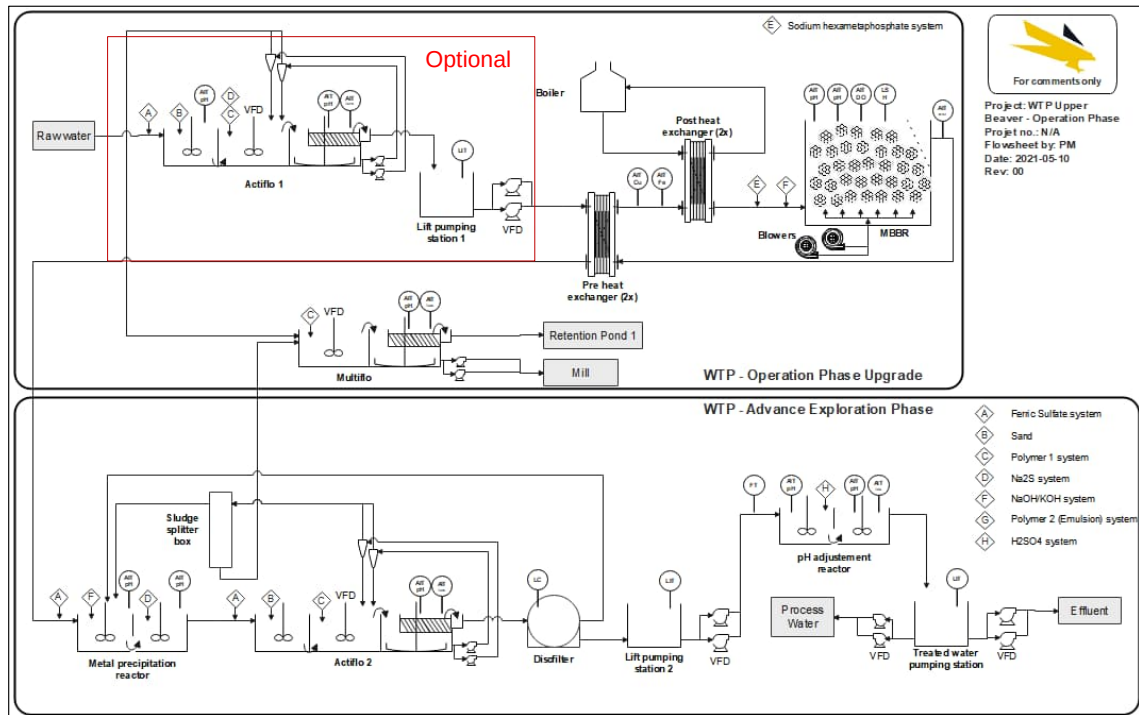


Figure 4.11-4: Process Flow Diagram of the Proposed EWTP Upgrade

4.12 Fuel and Chemicals, Storage and Management

Section 4.7.5 addresses chemicals and reagents to be used at the project site. The primary fuel requirement for the Project will be diesel for equipment used in the underground mine, open pit, and TSF. To accommodate the anticipated fuel usage for the Project, storage tanks will be installed to service the site. Tanks will be double-walled and placed within secondary containment for added protection. Two tanks (currently anticipated to be approximately 50,000 L) will be placed at the shaft to service the underground fuel bays, while an additional two tanks of similar size will be situated at the contractor pad to service the open pit truck fleet, the truck fleet used for the TSF, and other ancillary surface requirements. A smaller quantity of gasoline is also anticipated to be stored on site to accommodate passenger vehicles.

The Project includes the use of a mobile CNG storage and delivery system, consisting of a truck-mounted module designed for the transport, storage, and controlled dispensing of natural gas to onsite equipment and/or infrastructure. The truck-mounted system allows for flexible deployment across areas not serviced by a natural gas line distribution system. CNG may be transported to the site from authorized filling facilities and is then delivered to designated distribution points. The CNG storage truck will be operated by trained personnel following established safety procedures, including inspection, leak detection, and emergency response protocols.

The anticipated quantities of fuel and fluids to be stored at the site are shown in Table 4.12-1.

Table 4.12-1: Anticipated Fuel and Related Tankage Summary

Fuel / Fluid	Location	Estimated Tanks / Volume
Diesel (ultra-low sulphur)	Shaft, Contractor Pad	4 × 50,000 L
Diesel Exhaust Fluid	Maintenance Shop	18 × 1,200 L totes
Gasoline	Contractor Pad	1 × 10,000 L
Coolant	Maintenance Shop	1 × 5,000 L
Engine Oil	Maintenance Shop	1 × 30,000 L
Hydraulic Oil	Maintenance Shop	1 × 10,000 L
Transmission Fluid	Maintenance Shop	1 × 10,000 L
Axle Fluid	Maintenance Shop	1 × 30,000 L
Waste Oil	Maintenance Shop	2 × 30,000 L
Waste Coolant	Maintenance Shop	1 × 5,000 L
Gear Oil, Transmission Fluid, Windshield Fluid and Grease	Maintenance Shop	1,200 L replacement bins
CNG	Intake, Shaft	33,536 L
Propane ¹	Intake, Shaft	1x 170,000 L 1x 227,000 L

Notes:

1. GHG estimates made using propane as worst-case. CNG (transported to site by truck) may be used instead.

4.13 Waste Management

4.13.1 Solid Waste

Domestic and special management / hazardous materials resulting from the Project will be temporarily stored at site and regularly shipped off-site to appropriate facilities for disposal in accordance with all applicable regulations, including for hazardous materials. A demolition landfill may be established on the site for disposal of non-hazardous demolition wastes during closure.

4.13.2 Domestic Sewage

Domestic sewage during the construction phase of the Project is intended to be handled using the existing domestic sewage treatment system and supplemented by temporary sewage treatment systems (i.e., holding tanks that are permitted and routinely emptied by a licenced contractor). Treated wastewater from the system will be pumped to Retention Pond 1. Related solid waste will be temporarily stored at site until being shipped off site for disposal at an approved facility.

Domestic sewage will be treated by an appropriately-sized, sewage treatment plant during the operations phase and into the closure phase. Effluent from this plant will be transferred to Retention Pond 1 or directly to Retention Pond 2 and incorporated into the integrated water management system for re-use, treatment as necessary, and subsequent discharge in accordance with applicable regulatory requirements. Related solid waste will be temporarily stored at site until being shipped off site for disposal at an approved facility.

4.14 Power Supply

A 44 kV distribution line provides power for the AEX Program and will be used to support construction phase activities but is limited to 9.5 MW. In order to support the increased power requirements for mine operations (primarily the process plant), an approximately 9 km 115 kV transmission line will be constructed which generally follows the current 44 kV alignment and will connect to a Hydro One transmission station to the southwest of the Project site at Dobie, Ontario.

The environmental study for the transmission line will follow the Class Environmental Assessment for Transmission Facilities established under the Ontario *Environmental Assessment Act*, and has been removed from the scope of the federal Impact Assessment process for the Project.

Connection at the Project site will consist of a substation containing a primary circuit breaker and oil-filled transformers allowing for distribution of power throughout the Project site by means of aerial and buried distribution lines.

Diesel-fired generators may be used, primarily during the construction phase and particularly at more remote locations. Emergency diesel-fired generators will also be present on the site.

4.15 Atmospheric Emissions

4.15.1 Air Quality

Air emissions generated from the Project will be regulated, including under the provincial *Environmental Protection Act*. Sources of air emissions from the Project during the construction and operations phase include (but are not limited to):

- Site preparation activities
- Dust and tailpipe exhaust from haul trucks along haul roads
- Emissions from drilling, blasting, material handling, in-pit road dust and mobile equipment in the open pit
- Vent raises servicing underground operations
- Ore processing at the process plant
- Material handling at the process plant, crushers, and stockpiles
- Material handling at the TSF
- Concrete batch plant
- Exhaust from diesel generators
- Wind erosion at stockpiles and the TSF.

An air quality assessment was completed to allow comparison of the predicted cumulative air concentrations to applicable air quality criteria. The cumulative concentrations were predicted by adding air dispersion modelling concentrations to existing baseline condition concentrations.

Cumulative concentrations for all air parameters were predicted to be below the respective Ontario Ambient Air Quality Criteria (AAQC) at all points of reception (e.g., residences, cottages) for all averaging times with planned mitigation and operations controls for all applicable averaging times and Project phases. Cumulative concentrations for particulate predicted at the maximum point of impingement may be above the applicable AAQC, particularly in a localized area along the western property line.

Further information regarding the air quality assessment, including the results of dispersion modelling are presented in Appendix D-2.

4.15.2 Greenhouse Gas Emissions

Greenhouse gas (GHG) air emissions, including carbon dioxide, methane and nitrous oxide emissions, are of particular interest because of the relationship between GHGs and climate change on the broader scale. The main sources of GHG emissions from the Project as detailed in Appendix D-3 are:

- Mobile combustion: diesel equipment is used across the PA, but particularly at the open pit, underground mine, and supporting surface fleet.
- Stationary combustion: stationary propane and diesel equipment, such as related to heating equipment and emergency diesel generators.

- Blasting: the emulsion includes compounds containing carbon, which are assumed to be oxidized to carbon dioxide during detonation.
- Land use changes: removal of biomass carbon stocks (such as forest and other vegetation) and biomass decay.
- Acquired energy: GHG emissions from the use of electricity pulled from the Ontario grid.

The Project GHG sources and emissions are summarized in Table 4.15-1 and detailed in Appendix D-3. The net GHG emissions from the Project are estimated at 732.7 kt-CO₂e of direct GHG emissions and acquired energy GHG emissions over the construction, operations, and closure phases of the Project. The life of mine estimate is comprised of:

- Diesel combustion in mobile equipment, 313.9 kt-CO₂e
- Stationary combustion from propane, 243.0 kt-CO₂e
- Stationary combustion from diesel fuel, 1.8 kt-CO₂e
- Use of explosives (blasting), 4.0 kt-CO₂e
- Acquired Energy, 117.2 kt-CO₂e
- Biomass removal associated with land clearing, 52.7 kt-CO₂e.

The highest annual operations phase GHG emissions of 54.1 kt-CO₂e occur in Year 1. Both the open pit and underground mining are operational during this period, additionally the annual amount of material moved from the open pit decreases after this year, as does the level of fleet activity. Table 4.15-2 provides a summary of the GHG emissions for Year 1.

The largest source of GHG emissions during mine operations is the stationary combustion of propane as a heating source for the mine, contributing to 43% of the overall Project GHG emissions.

The average annual GHG intensity for the Project is 5.39 t CO₂e/kg-gold, which is below the Canadian average for gold mining operations. This can be attributed to the access to Ontario's low-carbon intensity grid from the start of the Project.

4.15.3 Net Zero

The development of a Net-Zero Plan (Appendix D-4) is a requirement under both the Strategic Assessment of Climate Change and the Tailored Impact Statement Guidelines, which includes the planning of a credible scenario to achieve net-zero emissions by 2050. However, it is important to recognize that the Project will not be in active operations past 2050, the year by which Canada has set its net-zero target.

The Project is expected to complete active closure by 2045, therefore 2050 would be post-closure with monitoring activities ongoing. Agnico Eagle is committing to net-zero by 2050 which involves periodically reviewing the Net-Zero Plan and expanding it to include all GHG sources and sinks that will be relevant in 2050.

To support national climate objectives and demonstrate environmental stewardship, Agnico Eagle has also committed to minimizing lifetime GHG emissions through the adoption of best available technologies and best environmental practices throughout the construction, operations, and active closure phases.

These decarbonization measures will build upon the climate positive design and planning features of the Project, which have resulted in a baseline scenario with low GHG emissions intensity.

4.15.4 Noise

Noise will be generated during all Project phases. During construction and operation phases, the site is expected to operate continuously for 24 hours per day, 7 days per week. Noise emissions generated from the Project will need to meet the applicable Ministry of the Environment, Conservation and Parks noise guideline(s) associated with the provincial *Environmental Protection Act* and the applicable federal Health Canada noise guideline.

The primary noise emissions from the Project are expected to originate from equipment and infrastructure used for construction and operational purposes. This includes stationary equipment and mobile equipment fleet operating at different areas of the mine, equipment used for production above ground including, ventilation systems and noise transmission through walls, roofs and ventilation openings of major facilities and infrastructure.

The Project's construction and operation phases are expected to have the greatest potential to affect the environment with respect to noise. The other two phases of the Project (closure and decommissioning phase, and passive closure phase) are expected to involve the use of similar (or lesser) noise-generating equipment than the construction phase. Therefore, the Project noise effects during closure and decommissioning, and passive closure, are expected to be conservatively represented by the assessment of the construction phase.

The main noise sources by phase are:

- Construction phase: construction drilling, earthmoving equipment, haulage routes, mobile crusher plant, mobile equipment for material handling, and transformers
- Operations phase: crushers, screen, process plant, haulage routes, surface ventilation fans for the underground mine, production drilling, mobile equipment for material handling, transformers, and emergency generators.
- Closure phase: demolition activities, earthmoving and regrading equipment, material haulage, and reclamation equipment.

Details regarding the various sources of noise are provided in Appendix E-2.

4.15.5 Blasting Vibration and Overpressure Emissions

Vibrations in ground, air and water will result from the use of explosives during all phases of the Project. The potential effect of blasting was evaluated with respect to ground vibration, air overpressure and water overpressure (Appendix E-3). By considering the planned nominal explosive charges per blast location provided by Agnico Eagle, the Project is expected to be compliant with limits established in the Noise Pollution Control Publication 119 (MOE 1978) at private residential structures adjacent to mining operations.

The potential effect of the Project on the nearest fish habitats was evaluated using the methodology established by the Fisheries and Oceans Canada. A blast management plan will be developed for the blasting operations to maintain vibration levels and water overpressure within Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (Hopky and Wright 1998).

4.15.6 Lighting

During the construction phase, activities are expected to be transient and to occur predominantly during the day; however, during the operations phase, more artificial lighting will be required to support Project activities. The Project is not located within or near a Dark Sky Preserve.

Light emitting diode high efficiency lighting is expected to be included in the future mine design, including exterior pole mounted lighting, and installed around the perimeter of the facilities to provide lighting for personnel safety and vehicle movements.

Industrial light pollution guidelines for Ontario will be applied to balance minimizing excess artificial light in the environment while presenting sufficient light to permit nighttime work to occur safely and effectively. As of Impact Statement preparation, there are no Ontario guidelines for industrial light emissions.

In assessing potential effects, international guidance on limiting obtrusive light from lighting installations has been applied. The assessment indicates that nuisance is not expected and should be manageable through use of responsible outdoor lighting practices and dark-sky friendly fixtures where possible. Further information is provided in Appendix L.

Table 4.15-1: Greenhouse Gas Emissions by Phase

Category	Phases			Total (kt-CO ₂ e)
	Construction (kt-CO ₂ e)	Operations (kt-CO ₂ e)	Decommissioning and Closure (kt-CO ₂ e)	
Direct - Underground Propane Heating GHG Emissions	13.2	103.2	0.0	116.4
Direct - Surface Propane Heating GHG Emissions	13.8	89.8	0.0	103.6
Direct - Process Propane Heating GHG Emissions	2.9	18.0	0.0	20.9
Direct - WWTP Propane GHG Emissions	0.2	1.6	0.2	2.1
Direct - Standby Gens - Diesel Fuel GHG Emissions	0.2	1.4	0.2	1.8
Direct - Explosive GHG Emission	0.6	3.4	0.0	4.0
Direct - Surface Fleet Diesel Fuel GHG Emissions	2.2	13.8	0.0	16.0
Underground Mine Fleet Diesel Fuel GHG Emissions	12.8	240.8	0.0	253.6
Direct - Open Pit Mine Fleet Diesel Fuel GHG Emissions	9.6	34.7	0.0	44.3
Direct - Land Use Changes from Biomass Removal	52.7	0.0	0.0	52.7
Indirect - Acquired Energy GHG Emissions	11.6	99.1	6.5	117.2
Net GHG Emissions	119.9	605.9	6.9	732.7
Foregone CO₂ Sequestration	10.4	107.1	15.0	132.5

Notes:

1. Subtotals may not add to totals due to rounding.
2. Estimate is conservative estimate as an onsite domestic landfill is not proposed to be developed.

Table 4.15-2: Greenhouse Gas Emissions for Maximum Operations

Category	Maximum Annual GHG Emissions (kt-CO ₂ e) ⁽¹⁾
Direct GHG emissions ⁽²⁾	40.5
Acquired energy (electricity)	13.6
Total annual GHG emissions	54.1

Notes:

1. Subtotals may not add to totals due to rounding.
2. Direct GHG Emissions include diesel and natural gas fuel usage from mobile and stationary combustion and blasting.

4.16 Aggregate Supply

Aggregate will be required during the construction and operation of the Project. In addition to the use of NPAG mine rock for construction, the existing aggregate source established for the AEX Program is expected to continue to be used. Other potential sources of aggregate for the Project may be investigated in the future, and could include a new source under the care and control of Agnico Eagle. Should investigations into additional aggregate sources be successful and a decision be made to develop an aggregate operation for the Project, the applicable regulatory approval process will be completed at the time.

Import of offsite aggregate material may also be required to meet specific design specifications. Aggregate brought in from offsite will be sourced from a permitted site and tested to confirm that it is suitable for use on site.

4.17 Workforce Requirements, Accommodations and Transport

4.17.1 Workforce

4.17.1.1 Workforce Region of Origin and Transportation

The majority of the workforce for the Project is intended to be local to the area, with the recognition that there may be difficulties in filling all required positions due to either competition with other sites / industries, or a local shortage of the required skill sets. Buses may be offered if there is sufficient demand and/or interest, such as from the Timmins Airport, and/or from surrounding non-Indigenous and Indigenous communities. This option would help to limit personal vehicle traffic on the road and reduce the risk of driver fatigue management especially post-shift and travel during poor weather conditions. Carpooling will also be encouraged, as appropriate. Parking will be provided for staff and visitors. Shuttle buses and other dedicated site vehicles will be used to transport personnel within the site.

Busing may also be employed to transport contractors and employees from a population centre during the construction phase to consolidate transportation to and from the Project. Out of town employees may fly into and out of the Timmins or Kirkland Lake airports during operations on commercial or charter operations as applicable.

4.17.1.2 Workplace Policies and Programs

Agnico Eagle intends to operate the Project in accordance with a set of core values and guiding principles that shape how the Company manages its workforce and conducts its business. These include a commitment to health and safety, integrity and ethical conduct, respect and dignity for all individuals, diversity and inclusion, Indigenous partnership and participation, and investment in employee development and workforce sustainability. These principles guide Agnico Eagle's workforce policies, programs, and employment practices throughout construction and operations.

Agnico Eagle maintains a range of workforce policies and programs that are intended to support employee well-being, a safe and respectful workplace, Indigenous employment, skills development, and responsible employment practices. The following policies and programs currently exist within Agnico Eagle or will be implemented for the Project, as appropriate:

- **Code of Business Conduct and Ethics** – Establishes expectations for ethical behaviour, professionalism, respect, accountability, and compliance with applicable laws for employees and contractors, with mechanisms to report concerns without fear of retaliation
- **Occupational Health, Safety, and Wellness Programs** – Provide a comprehensive framework to protect worker health and safety through safety management systems, training, hazard identification, emergency response, fitness for work requirements, and continuous improvement practices
- **Indigenous Employment and Participation Programs** – Support Indigenous employment, training, and career development through targeted recruitment initiatives, community partnerships, and cultural awareness training aimed at fostering an inclusive and respectful workplace
- **Diversity, Equity, and Inclusion Policies** – Promote equal opportunity, non-discrimination, and respectful conduct, and support the participation and advancement of women, visible minorities, and other underrepresented groups in the workforce
- **Learning, Training, and Workforce Development Programs** – Support operational readiness and long-term workforce sustainability through job-specific training, safety training, apprenticeships, leadership development, and upskilling opportunities aligned with regional workforce development objectives
- **Work Scheduling and Employment Practices** – Establish employment conditions consistent with industry standards for mining, including hours of work, rotational or site-based schedules, and compliance with applicable employment legislation to support safe and productive operations
- **Cultural Awareness and Respectful Workplace Training** – Reinforce expectations for professional behaviour and inclusion through training focused on cultural awareness, harassment prevention, and respectful engagement
- **Employee Assistance and Support Programs** – Provide confidential services and resources to support employee mental health, wellness, and work-life balance
- **Compensation and Benefits Programs** – Offer competitive compensation and benefits, including health and wellness coverage, disability programs, retirement savings plans, and other benefits consistent with Agnico Eagle's broader Canadian operations.

Through the implementation of these workforce policies and programs, Agnico Eagle seeks to support a skilled, inclusive, and stable workforce for the Project while contributing to regional employment, Indigenous participation, and long-term workforce capacity in Northern Ontario.

4.17.1.3 Construction Labour Force

Mine construction and development will occur over an approximately two year period. During the construction period, the majority of direct employment opportunities are expected to be filled directly by contractors as is typical of mine developments. Regional and local businesses and hiring local labour, with a focus on Indigenous Peoples and others in the local area, will be encouraged.

Employment opportunities with contractors are expected to include equipment operators, truck drivers, labourers, electricians, mechanics and other tradespeople. Actual positions will vary according to the work being conducted. Agnico Eagle will begin to ramp up their own Project workforce during this period (Figure 4.17-1), primarily consisting of administrative and professional positions, with additional hourly operations and trades positions added as construction advances. The workforce ramp-up is expected to accelerate through 2027 and 2028 to support underground mine development, commissioning activities, and production readiness in advance of operations.

4.17.1.4 Operations Labour Force

An estimate of the direct workforce required during the operations phase indicates a total of up to approximately 610 people across various positions and operational needs at the peak of operations (Figure 4.17-1; Table 4.17-1, to Table 4.17-14).

Open pit mining operations are currently expected to be undertaken by a contractor workforce with geology, engineering and other non-mining roles to be handled by Agnico Eagle.

The remaining mine operations workforce will consist of up to 264 underground mining workers, 122 maintenance workers, 116 plant staff, and 108 staff in various general and administrative positions (geology, engineering, administration, environment, health and safety, human resources, information technology, procurement, and general site services).

Initial staffing evaluations were undertaken based on an hourly workforce working two 10-hour shifts per day on a 5 day on / 4 day off / 4 day on / 5 day off schedule, and salaried workforce on a 5 day on / 2 day off schedule. Operational optimizations may adjust the schedule as required (e.g. rotational periods, 12-hour shifts). At this time, site-based operational personnel are anticipated to work a rotational schedule, with seven days on site followed by seven days off site currently identified as the preferred schedule. Alternative rotational schedules, including fourteen days on site followed by fourteen days off site, may also be considered during detailed operational planning to support workforce recruitment, retention and operational requirements. Schedules for senior supervisory staff may vary because of difficulty in duplicating some positions at this level.

4.17.2 Site Access

There is an existing site access connected to Beaverhouse Road which will continue to be used for the Project, potentially subject to some upgrades (Figure 4.17-2).

Based on an internal traffic assessment during summer 2021 that monitored periodically between July 4 and September 10, there was 1 to 21 vehicle trips each day (24-hour period), that were not identified as being associated with mining exploration or forestry activities. These trips are conservatively assumed to be members of the public or Indigenous Nations, such as accessing Beaverhouse Lake.

A new route to Beaverhouse Lake was established for the AEX Program to provide continued access (Figure 4.17-2) while avoiding public interaction with industrial mine traffic. This route will remain in place throughout all phases of the Project.

4.17.3 Accommodation

An accommodations complex (or similar) is not proposed to be developed as part of the Project due to the proximity of the site to local communities. Agnico Eagle anticipates that workers will commute daily from existing communities / residences located within about an hour drive in Ontario or Québec.

4.17.3.1 Worker Accommodation during Construction

As part of ongoing project planning, Agnico Eagle has identified a contingency option to construct and operate a temporary off-site worker accommodation camp to support construction activities, if required. The current Project design assumes that the construction workforce will commute from local communities; however, should labour availability, logistics, or other considerations necessitate, a temporary accommodation camp may be developed, owned, and operated by the construction contractor to support the construction phase workforce. The camp would not form part of the Project infrastructure operated by the Proponent.

If implemented, the construction camp would accommodate approximately 250 to 350 workers over a period of up to two years during the construction phase. The camp would consist of modular, portable housing units and associated facilities, including dining, administration, and recreation spaces. Supporting infrastructure would include potable water supply, wastewater collection and treatment or disposal systems, solid waste management facilities, power generation and distribution, and site access. The camp is expected to occupy an area on the order of approximately 5 to 15 ha, including accommodation units, supporting facilities, access roads, utilities, and associated infrastructure. The final footprint will depend on detailed design, servicing requirements, and site-specific considerations.

The camp would be located within an approved nearby area in the community of Kirkland Lake or Larder Lake, and would be designed, constructed, operated, and decommissioned in accordance with applicable federal and provincial regulations and standards. Operation of the camp would be managed by qualified personnel, with procedures in place for water use, wastewater handling, waste management, and emergency response.

4.17.3.2 Regional Housing Initiative

Agnico Eagle is advancing a regional housing initiative in the Kirkland Lake area to support workforce accommodation across its operations in the region. This initiative is not a component of the Project; however, it may provide supplementary accommodation for personnel associated with the Project and other Agnico Eagle operations.

The development includes eight apartment buildings that will provide approximately 340 beds in one-, two-, and three-bedroom units. The selected site is located within Kirkland Lake and has been identified to take advantage of existing municipal services and infrastructure, supporting efficient integration with the surrounding community and consistency with local land use planning objectives.

By increasing the availability of purpose-built housing, the initiative is anticipated to help reduce demand pressures on existing local housing supply. In addition to supporting workforce accommodation needs, the development is intended to provide longer-term community value. Over time, these units may transition to broader residential use, such as family-oriented rental



housing or other community-focused purposes, thereby contributing to the local housing supply and supporting sustainable community development.

Delivery is currently targeted for 2028, subject to approvals and ongoing engagement with municipal and community stakeholders.

Table 4.17-1: Preliminary Operations Workforce – Underground Mining

Representative Position	Approximate Quantity
Development Miner	80
Rehabilitation Miner	3
Stope Raise Miner	6
Scoop Operator	23
Stope Drill Miner	9
Stope Blast Miner	11
Stope Muck Miner - Dry Backfill	3
Stope Haul Miner	35
Stope Ground Support Miner	8
Boom Truck Operator	4
Volvo Operator (Service-Men)	4
Service Scoop Operator (Sump)	2
Labour - Lunch Room, Underground Tool Crib	2
Concrete Truck Operator	2
Water Truck Operator	2
Rockhammer Operator	4
Deck Men	1
Shaftman	2
Cagetender	4
Underground Services Miner	16
Utility Man	2
Underground Grader Operator	2
Underground Services Miner	2
Underground Services Miner	4
Underground Construction Miner	4
Underground General Supervisor	2
Underground Assistant-General Supervisor	2
Underground Supervisor	20
Superintendent	1
Shaft Operator	4
TOTAL	264

Table 4.17-2: Preliminary Operations Workforce – Underground Maintenance

Representative Position	Approximate Quantity
Underground Mechanics	72
Welder	2
Underground Fixed Mechanic	5
Underground Electrician / Programmer	8
Mechanics - Fixed Equipment	10
Electric - Fixed Equipment	5
Surface Men - Maintenance	6
Reliability Engineer	1
Planner	2
Underground Maintenance Supervision	9
Underground Maintenance General Supervision	1
Superintendent	1
TOTAL	122

Table 4.17-3: Preliminary Operations Workforce – Process Plant

Representative Position	Approximate Quantity
Water Treatment Operator	6
Superintendent	1
Supervisor	4
Crusher Operator	6
Operator Filtration	6
Grinding Operator	4
Leach / CP Operator	4
Operator Paste Plant	4
Relief Operator	2
Process Controller	4
Reagent Operator	4
Loader Operator (Copper Concentrate Loading)	4
Chief Metallurgist	1
Production Metallurgist	1
Junior Metallurgist	1
Metallurgical Technician	5
Loader Operator (Reclaim Stockpile)	8
Dozer / Compactor Operator (Dry Stack)	6
Truck Operator (Dry Stack) If Conveyor Option = 4	6
Mechanics For Mobile Equipment	5
Electrical Supervisor	2
Electrical Planner	1
Programmer	2
Mechanical Supervisor	2
Instrumentation Technician	6
Instrumentation Technician (Day Work)	2
Mechanical Planner / Buyer	2
Reliability And Preventative Maintenance Engineer	1
Millwright	16
TOTAL	116

Table 4.17-4: Preliminary Operations Workforce – Administrative, Professional and other Services

Representative Position	Approximate Quantity (Year 6)
Engineering Superintendent	1
Mine Engineering Coordinator	1
Long-Term Planning Engineer	1
Short Term Planning Engineer	2
Drill And Blast Engineer	1
Drill And Blast Technician	3
Surveyor	8
Geotechnical Coordinator	1
Geotechnical Engineer	2
Geotechnical Technician	2
Capex Dyke Engineer	1
Ventilation Technician	2
Ventilation Engineer	1
Surface Surveyor	1
Electric Engineer	1
Technician	8
Exploration Technician	1
Resource Geologist	1
Production Geologist	4
Exploration Geologist	2
Coreshack Technician	2
Superintendent	1
Geology Coordinator	1
Finance Superintendent	1
Financial Coordinator	1
Controller	1
Accounting	2
Administrative Technician	2
Mine Manager	1
Supervisor	1

Representative Position	Approximate Quantity (Year 6)
Leader Operation	1
Heavy Equipment Operator	1
Labourer	2
Labourer	2
Building Mechanics	1
Plumber	1
Carpenter	1
Electrician	1
Helper	1
Environment Superintendent	0.5
Environment Coordinator	1
Data Management Lead	1
Environment Technician	2
Health And Safety Superintendent	0.5
Health And Safety General Supervisor	1
Nurse	2
Safety Counselor	4
Community Relations Coordinator	2
Human Resources Superintendent	1
Human Resources Coordinator	1
Human Resources Counselor	2
General Supervisor Recruitment	1
Recruiter	1
Training Coordinator	1
Heavy Equipment Trainer	2
Mobile Maintenance Trainer	2
Process Plant Trainer	2
IT Coordinator	1
IT Technician	2
IT / OT Developer	1
Telecommunication Specialist	1
Procurement Staff	1



Representative Position	Approximate Quantity (Year 6)
Warehouse Supervisor	1
Warehouse Attendant	6
TOTAL	108

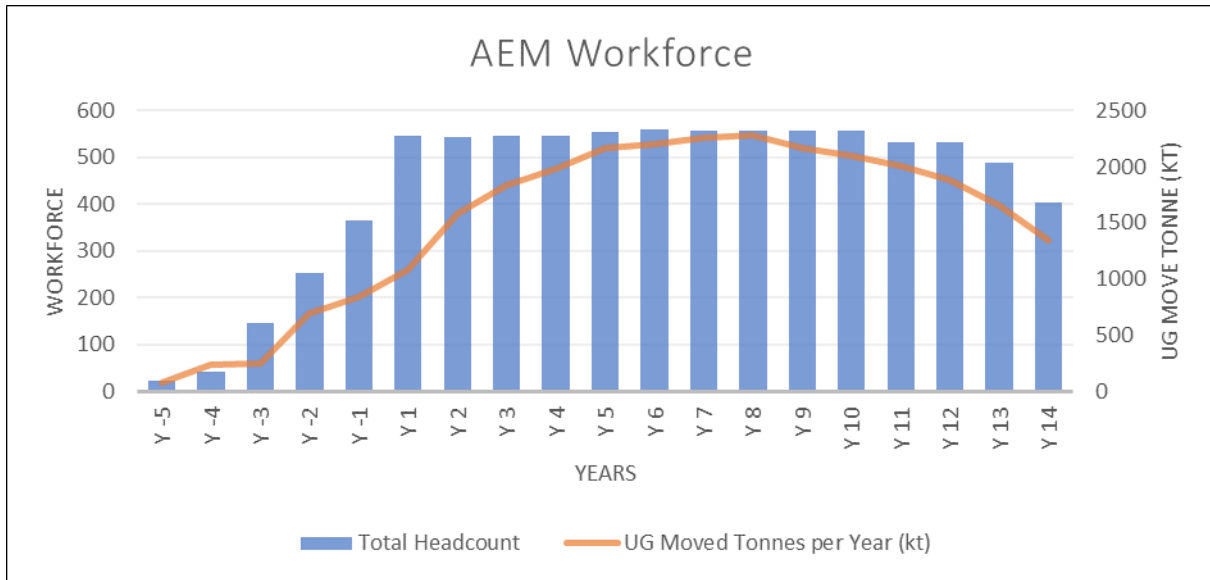


Figure 4.17-1: Total Headcount

4.18 Conceptual Closure Approach

4.18.1 Overall Approach

The conceptual closure approach described herein describes the main reclamation objectives, summary of proposed progressive reclamation activities, final reclamation and decommissioning, and anticipated site conditions following closure. Mine decommissioning and closure will be completed to satisfy the Rehabilitation Standards under Ontario Regulation 35/24 of the *Mining Act*. A comprehensive regulatory Closure Plan will be completed and certified prior to the construction phase, which will be amended periodically over the life of the mine as needed.

The primary goal of decommissioning and closure of the mine site is to establish a site that is physically, chemically and biologically stable. The Project footprint will be rehabilitated to a productive and natural state as practicable. The reclamation and decommissioning / closure objectives for the Project include:

- Re-establish natural drainage
- Rehabilitate disturbed lands
- Confirm site runoff meets regulatory criteria
- Establish a self-sustaining vegetative cover
- Creation of functional wetland habitat.

Infrastructure will generally be removed unless otherwise stipulated, such as based on agreements with the respective authorities and local communities. The Project site will be revegetated to support plant, wildlife and fish communities (or could be considered for other land uses as applicable). It is expected that revegetation will occur through active seeding and hand planting of seedlings of commercially available, native plant species, as well as natural revegetation from local vegetation communities.

A preliminary description of the proposed reclamation measures is provided in the text that follows and shown in Figure 4.18-1, subject to consultation, additional engineering and regulatory review. As the footprint of the Project site is small, it is expected that the active closure and decommissioning of the Project will be completed in one to two years after operations cease. Environmental monitoring will continue after reclamation is completed.

The *Mining Act* requires that a certified Closure Plan be in place before construction, and that financial assurance be provided for the decommissioning activities. Financial assurance is intended to protect the public interest by ensuring that closure measures can be fully implemented should the proponent be unable to complete the required work, including in circumstances such as insolvency. This mechanism provides assurance that closure and reclamation activities can be completed even if the proponent is unable to fulfill its obligations.

4.18.2 Progressive Reclamation

Progressive reclamation (including of historic mine hazards) and final closure of the Project site will be governed by the Ontario *Mining Act*, and its associated Regulations and Codes, and will be informed by ongoing engagement, including with Indigenous Nations.

Reclamation activities that can be performed prior to final closure and that do not pose a barrier to daily operations will be considered for progressive reclamation. Progressively reclaiming facilities and site features where practical reduces the amount of work and time required at final closure. It also provides useful knowledge to improve final reclamation success, particularly with respect to revegetation methods.

The limited footprint and design of the Project suggests that there may be limited opportunities for progressive reclamation during operation, but progressive reclamation will be pursued as reasonable, including for historical and exploration-related areas. Some potential opportunities include:

- Decommissioning and salvage of facilities and infrastructure not required for operations
- Recontouring and revegetation of disturbed areas that are not needed during operations
- Initiation of revegetation studies during operations to evaluate soil amendments and seed mixes to maximize the success of the final revegetation program
- Reclamation of portions of the TSF
- Advancement of the designated fish habitat development area within the open pit to final contours in preparation for completion during closure.

4.18.3 Final Reclamation

4.18.3.1 Underground Mine

Underground equipment and infrastructure (heavy equipment, pumps, pipelines, ductwork etc.) remaining at the time of closure will be purged of any hazardous fluids and materials and left in an inert state underground, or removed and managed according to regulations at the time, which may require shipment to an off-site landfill or recycling centre.

Openings to the underground from surface will be secured in accordance with the Mine Rehabilitation Code of Ontario. This includes both new and historic accesses and raises.

Underground workings will be allowed to naturally fill with water through gradual groundwater seepage. As a result of the local topography and natural groundwater levels, the workings are expected to fill with water to below the final ground surface and no long-term discharge from the openings to surface from underground is expected.

4.18.3.2 Open Pit and Misema River Diversion

The approach to refilling the open pit with water will be assessed further through the regulatory processes and detailed in the future certified regulatory Closure Plan, and may include development of fish habitat.

The open pit is proposed to be filled with inflow from:

- Ava Lake, approximately 10% of the Ava Lake inflow capacity, as estimated based on currently available information, will be directed to the open pit
- Groundwater inflow
- Natural runoff draining towards the open pit.

It is anticipated that the open pit will be filled in about 1 year under annual average conditions and about 1.5 years for dry conditions. A summary of the annual average and dry conditions for the hydrologic inflows are provided in Table 4.18-1. There is the potential that this process could be enhanced through measures such as transferring an increased proportion (i.e. higher than 10%) of the spring melt water from the Misema River system into the open pit at closure, subject to regulatory approval.

During refilling of the open pit with water, pit lake water quality will be monitored and open pit slopes that will remain above the final pit lake level will be reclaimed. Fencing or similar measures will be used to support public / wildlife safety while the open pit fills with water to create a lake. The basin will be maintained at a target level below the natural Misema River elevation if needed, until such time as all regulatory requirements for reconnection are met (Section 8.5).

Once the pit lake is at final level and the water quality meets all regulatory requirements, Agnico Eagle proposes to connect the pit lake to the Misema River system, which will provide additional recreational and navigation opportunities, and aquatic habitat.

The Misema River diversion system will be decommissioned to naturalize flows from Ava Lake to the pit lake continuing into the Misema River. This will include the following activities:

- Dykes will be removed down to bedrock foundation or till unit as appropriate
- The inlets and outlets of the diversion channels will be filled with a low permeability plug.

Additional closure efforts may potentially include habitat creation in the diversion channels.

4.18.3.3 Stockpiles and Tailings Storage Facility

The primary potential closure concern with respect to the mineral wastes (mine rock, tailings and overburden) is the quality of runoff and seepage from the facilities. Preliminary geochemical investigations for the Project indicate that these materials exhibit a low potential for acid generation, and the long-term collection and treatment of water is not anticipated to be required based on modelling results to date (Section 8.5). These areas will be reclaimed, reshaped as needed for stability and to reduce potential for erosion, and revegetated to improve long-term aesthetics.

An overburden cover (amended as needed) will be placed over most of the TSF, with progressive seeding to establish a vegetative cover for erosion control. Armouring may be placed on slopes and within drainage channels to prevent erosion. Until the TSF runoff water quality is proven suitable for discharge, runoff from the TSF will drain to Retention Pond 2 for treatment and controlled discharge. When suitable, drainage will be regraded such that runoff flows from the TSF will be directed to Unnamed Stream 4 and 5 through Retention Pond 2 and Unnamed Stream 6.

All material from the ore stockpiles will be processed during the final years of operations. Once depleted, the footprint of the former ore stockpiles will be tested for ML / ARD potential and excavated if needed. Excavated materials, if any, will be transported and stabilized in the TSF prior to closing out that facility. Thereafter, the ore stockpile areas will be reclaimed at the end of the mine operations by regrading and revegetation.

Agnico Eagle proposes to utilize the stockpiled overburden and organic materials to support revegetation efforts progressively during operation and during closure. Stockpiled organics will

be fully utilized during reclamation activities. Reclamation of the residual overburden stockpile is not anticipated to be required; however, if any material remains after closure activities, the area will be reshaped if needed to a physically stable condition and revegetated.

4.18.3.4 Water Management Facilities

Once dewatering of the underground workings ceases and on surface water no longer needs to be treated or managed, the on surface water management infrastructure will be decommissioned:

- Ponds will be sampled to confirm acceptable water quality and will be treated, if necessary, then be drained. Bottom settled solids in the pond will be tested, and if appropriate will remain in place, or will be otherwise managed (such as dredging and removed for disposal in the underground workings or sent offsite to a licenced facility).
- A drainage channel from Retention Pond 2 will be constructed such that Retention Pond 2 passively drains to Unnamed Stream 5, which ultimately reports to Beaverhouse Lake.
- Pond liner(s) if any, will be punctured to allow for natural drainage. The surrounding dykes will be breached and recontoured over the liner to allow natural drainage to the environment.
- Additional overburden will be placed if needed to support revegetation.
- Berms and ditches used on site will also be breached or regraded as needed to allow for natural drainage to the environment.
- The water discharge structure at the Misema River and Beaverhouse Lake will be reclaimed by removing the pipeline on surface and in water and removing the diffuser structures.
- Similarly, the fresh water intake at Ava Lake will be reclaimed by removing the pipeline on surface and removing the intake structure.

As described above, the pit lake is intended to be reconnected to the Misema River system once the final level has been reached and water quality meets regulatory requirements. The diversion dykes will be lowered to allow for connection between York Lake and the Misema River, with the possibility of portions of the structures left in place below the natural water level to provide fish spawning habitat opportunities.

4.18.3.5 General Site Area

Agnico Eagle will pursue opportunities, and it is hoped that much of the equipment, tankage, machinery, pipelines, building and infrastructure waste materials generated through demolition, can be sold for reuse, or recycled as scrap metal. Building demolition wastes and equipment wastes that cannot be sold for reuse, or scrap, will be handled according to environmental regulations at that time, and are expected to be transported to an approved, off-site waste management facility.

Concrete building foundation(s) will be broken up and reduced to near grade to allow drainage, and will be covered with overburden, graded and revegetated. Where reasonable, clean demolition concrete will be used as a filling resource or will be recycled as crushed aggregate.

Power will be required during closure to support activities such as pumping and water treatment, until such time that these activities are deemed no longer necessary. Power related infrastructure not required during the active closure phase will be decommissioned with other equipment and infrastructure during this stage. Once water quality is suitable for discharge to the environment, power is no longer anticipated to be required. The remaining power related infrastructure will be removed and disposed of in accordance with regulatory requirements.

Petroleum products, chemicals and explosives will be depleted towards the end of operations. Remaining materials when no longer needed, will be disposed of according to regulatory requirements at the time.

Onsite access and haul roads which will not be required in the long-term will be scarified (broken up at surface), and revegetated when no longer needed to support final reclamation, long-term site management and environmental monitoring. Beaverhouse Road and the alternate access (i.e., Fork Lake Road) to the boat launch will be left in place for continued use.

An environmental site investigation will be conducted at the end of operations or early in the closure phase. Surficial materials found to be above acceptable criteria will be remediated on site or transported to an approved disposal facility off site.

4.18.4 Expected Site Conditions Post-Closure

The Project site is located in an area with public access in which traditional pursuits (i.e., hunting, fishing, trapping and recreational use) and forestry are the dominant land use, with some mineral exploration. The overall intent is to restore the Project site to a self-sustaining ecosystem. In such a condition, the site can provide wildlife and aquatic habitat and the potential for traditional pursuits. After completion of decommissioning and closure, no hazards will remain on the property that would be inconsistent with a natural environment. Long-term physical and chemical stability will be achieved and public safety maintained.

The currently envisioned post-closure site conditions are illustrated in Figure 4.18-1. Further detail will be provided in the regulatory Closure Plan required under the *Mining Act*.

Following final decommissioning and closure, the terrain will be similar to the pre-development conditions with the exception of the rehabilitated TSF. This facility will resemble a hill raised above the pre-development terrain. The revegetation program for the Project will use a mix of commercially available native species combined with natural revegetation and vegetation succession. Wildlife is expected to re-enter and use the site once vegetation is re-establishing.

Fish habitat area will be increased as a result of filling the open pit with water within the York Lake Basin. There are opportunities to create wetland and shoal areas as part of reclamation of this area.

Once the open pit basin is reclaimed and reconnected with the Misema River, the overall area of York Lake will be increased by approximately 14 ha providing additional recreational water use for local communities. This also results in an increase in the available volume of deep pelagic thermal refuge habitat for Lake Trout, Lake Whitefish and other large body species.

4.18.5 Post-Closure Monitoring

A post-closure monitoring program will be developed as part of the certified regulatory Closure Plan to maintain the physical, chemical, and biological stability of the site. Proposed monitoring activities may include the following:

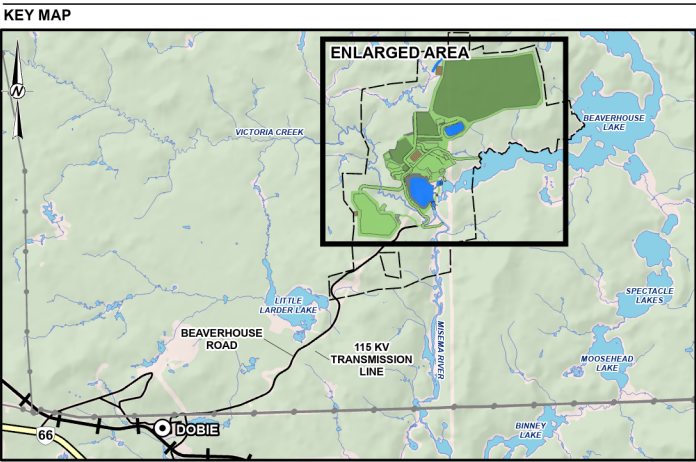
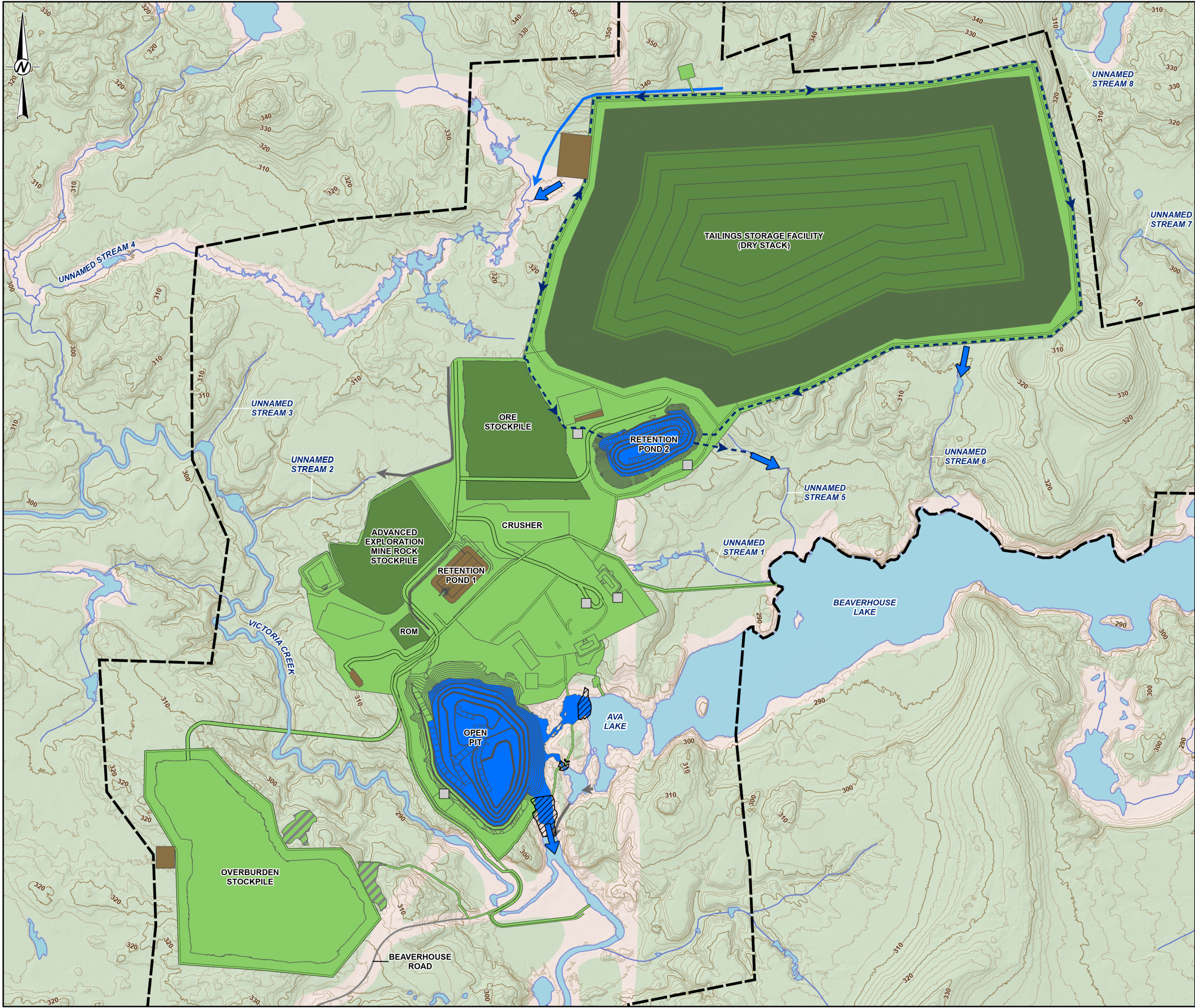
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- Regular general site inspections to monitor and review vegetation establishment and to evaluate whether remedial actions are needed (e.g., removal of trees from embankments).
 - Annual dam safety inspections conducted by a qualified Professional Engineer and dam safety reviews will be completed every 10 years following closure (or as otherwise required by regulations or best management practices).
 - Surface water and ground water monitoring will continue to demonstrate efficacy of decommissioning and closure measures.
 - Revegetation will be monitored until vegetation covers are proven to be self-sustaining.
 - Vegetation, aquatic and terrestrial monitoring will be completed to confirm decommissioning and closure plan objectives are met.

Table 4.18-1: Pit Lake Hydrodynamic Modelling Summary of Inflows

Inflows / Outflows for Pit Lake Model ⁽¹⁾	Average Conditions	Dry Conditions
	Total Flow (Mm ³)	
Ava Lake Inflow ⁽²⁾	4.4	4.5
Groundwater Seepage ⁽³⁾	0.07	0.09
Pit Wall Runoff	0.06	0.03
Natural Runoff	0.02	0.01
Precipitation	0.08	0.04

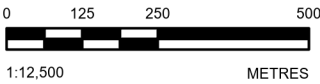
Notes:

1. Underground volume to be flooded is approximately 4.4 Mm³ (Email communication March 26, 2024, "RE: Upper Beaver Project – Underground mine volume"). Pit begins to fill once underground volume is filled.
2. During filling, only 10% of Ava lake flow capacity (from M1 station data) is directed to pit. Once pit is full, 100% of Ava lake capacity is assumed (prorated based on Water Survey of Canada data for long-term timeseries).
3. Groundwater seepage is present until pit is filled – assumed zero once pit is flooded.



SCALE: 1:120,000

- LEGEND**
- | | | | |
|--|-------------------|--|--------------------------------|
| | PROPERTY BOUNDARY | | MAJOR CONTOURS (10 M INTERVAL) |
| | LOCAL ROAD | | MINOR CONTOURS (2 M INTERVAL) |
| | WATERCOURSE | | |
| | WATERBODY | | |
- PROPOSED POST-CLOSURE LANDSCAPE**
- | | |
|--|---|
| | ENGINEERING CAP |
| | VEGETATED COVER |
| | BACKFILLED AND REVEGETATED |
| | RECLAIMED (VEGETATED) |
| | BREACHED AND VEGETATED |
| | WATER (RESTORED OPEN PIT AND PONDS) |
| | DIVERSION CHANNEL |
| | DITCH |
| | DYKE (DECOMMISSIONED) |
| | DIVERSION CHANNEL (DECOMMISSIONED) |
| | FLOW DIRECTION FOR DISCHARGE TO ENVIRONMENT |



- NOTE(S)**
1. ALL LOCATIONS ARE APPROXIMATE
- REFERENCE(S)**
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
 2. CONTOURS EXTRACTED FROM LIDAR, PROVIDED BY AGNICO EAGLE MINES, 2021.
 3. SITE PLAN AND PROPERTY BOUNDARY PROVIDED BY AGNICO EAGLE, FEBRUARY / DECEMBER 2025.
 4. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT AGNICO EAGLE MINES			
PROJECT UPPER BEAVER GOLD PROJECT			
TITLE PRELIMINARY POST-CLOSURE LANDSCAPE			
	CONSULTANT	YYYY-MM-DD	2026-06-25
	DESIGNED	----	
	PREPARED	MD	
	REVIEWED	----	
	APPROVED	----	
PROJECT NO. CA0042150.6518	CONTROL 0012	REV. A	FIGURE 4.18-1

4.19 Project Optimizations since the Impact Assessment Planning Phase

4.19.1 Mine Rock Stockpile

During the Impact Assessment Planning Phase, mine rock was indicated to be stored in an expanded facility developed for the AEX Program. As engineering studies for the Project have advanced, investigations of this area have determined that subsurface conditions are not favourable for supporting loadings arising from storage of the full quantity of mine rock from Project operations. Agnico Eagle has determined that there is available storage volume within the area proposed for the TSF and are intending to store those volumes of mine rock which require surface storage within that facility.

4.19.2 Tailings Storage Facility Water Collection

Water from the TSF was originally planned to be collected in a series of ponds along the south side of the facility. Subsequent engineering has optimized the collection system to consist of a system of perimeter ditching which will convey water to Retention Pond 2.

4.19.3 Infrastructure Alignments

The haul road for the operations phase overburden stockpile has been relocated from the route depicted in the Detailed Project Description to a more northern location. A crossing of Victoria Creek is still required which will be a clear-span structure which remains above the high water mark. The overall gradient of the road has been reduced which improves safety and reduces the overall fuel requirements for haulage, improving the economics of this aspect of the Project.

Preliminary routing of onsite roads previously identified have also occurred. For example, the access around the open pit was originally planned to come off of Beaverhouse Road near the confluence of Victoria Creek and Misema River. This route has been optimized to remove a bridge crossing of the Misema River.

The preliminary alignment of the 115 kV transmission line shown in the Detailed Project Description connected to the Project site from the west, north of the overburden stockpile. The transmission line will now follow the existing 44 kV route near the Project site. The final length of the transmission line within the site will be routed east of the open pit.

4.19.4 Operations Phase Effluent Discharge

The operations phase effluent discharge location has been relocated from the Misema River downstream of the Misema River diversion system, to the north side of Beaverhouse Lake. This change in location was driven by the completion of additional studies and information including, updated receiving water quality guidelines, receiving water assessment (including mixing zone assessments), and integrated water balance and water quality forecast modelling. The discharge locations both avoid sensitive areas, including spawning habitat and water intakes; however, the Beaverhouse Lake location has additional advantages. The primary advantage of the proposed operations discharge locations is that it provides improved assimilative capacity than the Misema River location due to physical conditions including greater widths and depths in this location which allows for greater dispersion of the effluent. This results in enhanced mixing conditions, especially under dry (low flow) climate conditions, which helps to reduce the size of the mixing zone and conditions within the mixing zone. This is due to physical characteristics of

the discharge location as well as the ability to install a larger diffuser. Based on the enhanced mixing conditions this location in turn provides improved water management flexibility including the ability to discharge year-round with fewer restrictions (i.e., the need for seasonal prorated discharge) and reduces the need for the construction of larger on site ponds to store water when effluent to receiver mixing ratios could not be achieved.

4.19.5 York Lake Diversion

The diversion system to allow the Misema River flows to bypass York Lake and the open pit basin have been optimized from the original four dyke configuration presented during the Impact Assessment Planning Phase. The design has reduced the number of dykes to three, removing one of the two dykes at the northern outlet of Ava Lake and moving the remaining one to an area approximately 90 m to the east. The proposed system avoids the known archaeological site.

4.20 References

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