Curraghinalt Gold Project, Co. Tyrone, N. Ireland
Dalradian Gold Ltd.

Project Overview

October 2024

Executive Summary

Extensive exploration work has demonstrated that Curraghinalt, Co. Tyrone contains one of the world's most promising undeveloped gold deposits and contains substantial quantities of silver, copper and other critical minerals including antimony and tellurium (i.e. it is a polymetallic deposit). Permission is sought for the Project to enable the applicant to develop one of the world's most advanced underground mines whilst employing high standards of environmental management for modern mining.

Over the 20-to-25-year life of mine, some 8.7 million tonnes of ore (mineralised rock) will be extracted from underground and processed on the surface to produce a concentrate (or metallic sand) which will be subject to final processing off-site.

The minerals are contained in a series (18-20) of narrow (~ 50cm), steeply dipping (50-75 degrees) quartz-carbonate veins that extend from the surface to some 1,200 metres below ground. These veins extend laterally for several kilometres.

The underground extraction will seek to remove these narrow veins through a series of access/development tunnels. Primary crushing and ore-sorting will take place underground with the resulting ore being conveyed to the surface for processing in the mill building. Waste rock and some of the residue from the mill processing (tailings) will be placed back underground and used to fill the voids created during extraction. The paste backfill plant will also be located underground.

The Project will involve extracting the mineral bearing ore, transporting it to the surface via a decline (tunnel). On the surface, the ore will be processed to extract concentrates of gold and other valuable minerals. The mine will have a production life of up to 25 years, yielding an estimated 3.5 million ounces of gold concentrate, 1,721,000,000 ounces of silver concentrate and some 15,000 tonnes of copper, and other minerals concentrates over this period.

During the extraction and processing of the ore, water will be captured both underground (entering the mine workings) and on surface (from rainfall). These water abstractions have been considered and dealt with, in parallel, via two abstraction licence applications which form part of the overall conjoined inquiry.

All water contacting active areas on the site and all process related waters will be treated via a reverse osmosis water treatment plant to ensure environmental protections before being discharged into the Owenreagh River and Owenkillew River (through feeder streams or burns). These water discharges are also subject to consenting applications to the Northern Ireland Environment Agency and form part of the conjoined inquiry.

Electrical power, needed for the Project, will be served through a standalone power supply from Strabane substation. The supply will be a combination of overhead line and underground cabling. This connection has been brought forward by Northern Ireland Electricity Networks and forms part of the application package being considered at the inquiry.

Waste rock and tailings that cannot be placed back underground will be placed on surface in an engineered facility called a dry-stack tailings facility, the construction of which will be

governed by construction quality assurance (CQA). The overall operational footprint of the facility sits, in part, on a local unbound public road. Some 800 metres of this adopted track will be abandoned and is subject to a Road Abandonment application which forms the final part of the 8 applications that comprise the conjoined inquiry. An alternative/substitute road is proposed which would be constructed to a higher standard than the existing adopted track to allow local through traffic where needed.

A conceptual mine closure and rehabilitation plan has been prepared. The plan will be reviewed periodically though the life of the project and updated, in consultation with regulatory authorities and other stakeholders. Closure planning will be further developed as the project engineering process continues.

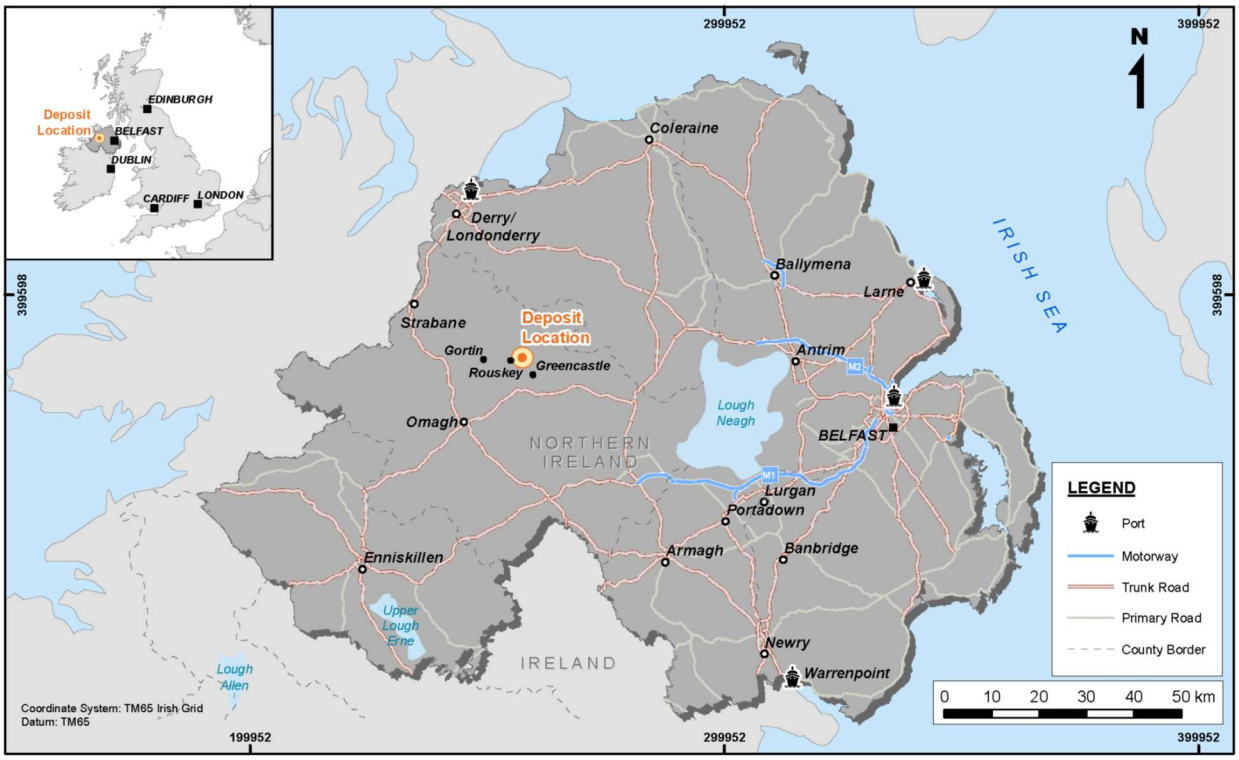
The Project has been subject to a detailed environmental impact assessment (EIA). An extensive programme of environmental management, mitigation and monitoring plans will be implemented over the lifetime of the Project, as part of an Environmental & Social Management System (ESMS). The ESMS will be implemented for the construction, operational and closure / decommissioning phases. Care will be taken to harmonise DGL's ESMS and procedures with those of its contractors, particularly during the construction phase. All applicable plans will be secured by condition so as to ensure a high standard of environmental controls over the Project.

Contents

1.0 Introduction

Dalradian Gold Ltd. (DGL) is a wholly owned subsidiary of Dalradian Resources Inc. The company has been working on the Curraghinalt Gold Project since 2009 to develop an underground mine for valuable minerals. The project area is located c. 12 miles northeast of Omagh, Co. Tyrone, Northern Ireland, refer to Figure 1-1.

Figure 1-1 Project Location Map



Extensive exploration work has demonstrated that Curraghinalt contains one of the world's most promising undeveloped gold deposits and contains substantial quantities of silver, copper and other critical minerals (i.e. it is a polymetallic deposit). The minerals are contained in a series (18-20) of narrow (~ 50cm), steeply dipping (50-75 degrees) quartz-carbonate veins that extend from the surface to some 1,200 metres below ground. These veins extend for several kilometres.

The Project will develop one of the world's most advanced underground mines whilst employing high standards environmental management for modern mining. The purpose of this document is to provide an overview of the Project.

The Project, in overall terms, will involve extracting the mineral bearing ore, transporting it to the surface via a decline (tunnel). On the surface, the ore will be processed to extract concentrates of gold and other minerals. The mine will have a production life of up to 25 years, yielding an estimated 3.5 million ounces of gold concentrate, 1,721,000 ounces of silver concentrate and some 15,000 tonnes of copper, and other minerals concentrates over this period.

The Project Overview has been prepared on behalf of Dalradian Gold Ltd. by Tim Paul (SLR Consulting). Tim is SLR's Mining sector lead for the Europe region. He is a chartered engineer & chartered minerals surveyor with over 30 years' experience in providing minerals planning, permitting & EIA; mine waste & tailings management; mine / quarry closure and transactional due diligence services for mining and minerals developments in Ireland, Europe and internationally. He has a primary degree in civil & environmental engineering from Trinity College, University of Dublin; and a master's degree in geotechnical engineering from Imperial College, University of London. His professional accreditations include Chartered Engineer, Institution of Civil Engineers; Chartered Engineer, Institution of Engineers of Ireland; and Chartered Mineral Surveyor, Royal Institution of Chartered Surveyors

Mr. Paul has been involved with the Curraghinalt Gold Project since 2012, managing the initial environmental baseline studies; preparing the planning application and supporting reports for the exploration adit extension (bulk sampling) exploration works; and managing SLR's contributions to the current mine planning application process.

His roles and involvement with mine developments in N. Ireland, Great Britain and the Republic of Ireland include:

- Technical advisor to Irish Salt Mining & Exploration (ISME) Kilroot Salt Mine, Co. Antrim, N. Ireland since 1999 on underground mine design and development, mine stability, planning, permitting, and environmental management issues;
- Project director for SLR's independent review of mine waste facility at Drakelands Tungsten Mine, Devon, England, and subsequent MWF redesign to increase capacity from 65 million tonnes to 104 million tonnes. Assessments to support Environmental Permit variation application to the Environment Agency for the revised design of the mine waste facility, with permit subsequently granted;
- Project director leading the SLR multi-disciplinary team developing and designing the detailed mine closure scheme for Foss Barites Mine in Scotland;
- Project director within the SLR project team undertaking an independent Dam Safety Review for the Randalstown tailings storage facility at Boliden Tara Mines, Co Meath, Ireland.

2.0 Previously Approved Exploration

Exploration of the Curraghinalt deposit commenced in 1983. By 1987, planning permission[1] was granted for mineral exploration, including the development of a portal, an adit, underground tunnels, three underground headings, stockpiles (of topsoil, soil and rock) and ancillary buildings. A discharge consent[2], to the neighbouring Curraghinalt Burn, was also obtained in 1987 to accommodate drainage from the workings. However, at the time it is understood that the use of explosives was not permitted. Progress underground was found to be correspondingly slow and insufficient to allow for economic development. By circa 1990, the site was closed and largely restored.

In 2009 Dalradian Resources acquired Dalradian Gold Limited (DGL), which was the holder of four Mineral Prospecting Licence areas (as licensed by the Department for the Economy, formerly the Department of Enterprise, Trade and Investment). These licenses were designated DG1 (Dalradian Gold 1), DG2, DG3, and DG4 with the same naming convention). The Curraghinalt deposit/resource sits within DG1. To improve understanding of the scale and nature of the deposit, since 2010 DGL have invested in undertaking extensive drilling programs using Permitted Developed rights to drill approximately 400 holes and recover almost 200 km of rock core. This work was supported by DGL securing water abstraction licenses[3], a Northern Ireland Water standpipe licence[4], a Northern Ireland Water Trade Effluent Agreement[5], and a Waste Management Exemption certificate[6]. At the same time, a series of environmental monitoring stations were established to begin building an environmental understanding of the wider area and to inform a 2013 Planning Application for a bulk sample (underground extraction) permission involving the re-opening and extension of existing exploration tunnels.

In January 2014 and March 2015, DGL obtained planning permissions[7] for an extension to existing underground exploration tunnel, including temporary buildings, vehicle parking, waste rock storage area, passing bays and a water treatment plant. A complementary discharge consent[8] was issued to DGL in February 2014 to take control and responsibility for the ongoing discharge against specified thresholds. In October 2014 DGL obtained planning permission[9] for a revised explosives store location, a temporary explosives store building and related ancillary works.

Under these planning permissions DGL extended the existing exploration tunnel and extracted a 15,000 tonne bulk ore sample for metallurgical testing as part of feasibility studies for development of an operational mine at the site. The permissions to date were essentially to allow for the collection of site-specific data (most specifically geological, engineering and environmental) to inform the understanding of the environment and to further assess the potential for development of the current Project. For example, these exploration works were carried out using the same mining techniques (drilling & blasting) to now be adopted for the

[1] K/363/86.
[2] 10611/87
[3] AIL/2011/0025 and/or AIL/2011/0026)
[4] 65-2018-009
[5] T45047
[6] 34/17
[7] K/2013/0072/F and K/2014/0246/F respectively
[8] 068/12/02
[9] K/2014/0387/F.

Project, and the exploration work also deployed backfilling and a surface waste storage facility for waste rock which has since been rehabilitated as specified. Similar to the 2015/2016 bulk sample underground extension works, some of the existing exploration infrastructure will again be incorporated further into the Project as detailed below.

The extensive and progressive exploration to date has allowed for continued development of confidence in both the mineral resource and a corresponding mine plan and processing plant that have a determined performance (in some instances a calibrated site-specific performance, e.g. dewatering of mine workings to date) and outputs fitting within the characterised deposit (e.g. mine waste characterisation) and environmental setting. As part of the application for the bulk sample underground exploration works, different 'closure scenarios' or outcomes were considered, which included that if a viable resource was determined that 'a new application for a mine development is lodged'. This new application for mine development, which is now the subject of this Project Overview and Inquiry, was a stated potential outcome in 2013 and represents the culmination of 15 years of continued investment at the site.

3.0 Project Development Areas

The Project, in basic terms, involves the extraction of mineralised ore within the underground mine area, loading it onto a conveyor, and transporting it to the surface via an underground decline. On the surface, the ore will be further crushed and milled, and the valuable minerals will be extracted in the form of a metal concentrate using flotation processes within the processing plant. The mine will have a production life of up to 25 years.

The main elements of the Project will take place within different areas of the Project application site, refer to the Project Development Plan in Figure 3-1 below.

i) **Proposed Mineral Extraction Area:** area where the mineral deposit is known to occur, and this represents the maximum extent of the proposed underground mine under the current planning application;

ii) **Proposed Surface Infrastructure Site**: area where the process plant; the dry stack facility (DSF) for mine waste management, water management infrastructure (including surface drainage, water storage ponds, and water treatment plant), ancillary buildings (such as offices, laboratories) and perimeter fencing will be located;

iii) **Existing Site Infrastructure Site**: the existing exploration infrastructure located on the northern side of Camcosy Road that will serve as a works base for the underground mine development. It includes the existing exploration adit portal office, workshop, hardstanding areas, fuel storage, water treatment plant, explosives storage area (which will be decommissioned following completion of the mine construction) phase, and the existing ventilation raise.

iv) **Proposed Mineral Exploration Area**: area beyond the Proposed Mineral Extraction Area for future exploration of the Curraghinalt deposit by means of

underground drilling and exploration adits. All exploration in this area during the life of the Project will be at least 100 metres below the existing ground surface.

v) **Camcosy Road Existing Passing Bays**: the existing passing bays on Camcosy Road will be used during the construction phase of the Project.

Figure 3-1 Project Development Plan Areas

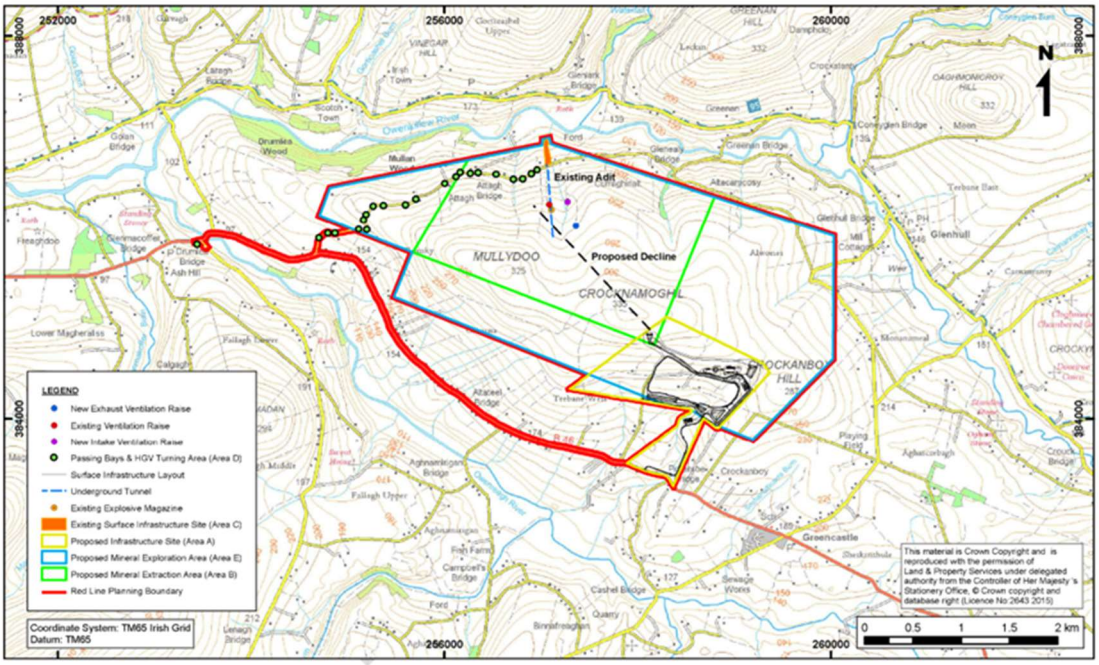


Figure 1-4: Curraghinalt Project sites

4.0 Main Elements of the Project

The main elements of the Project within the project development areas are summarised as follows:

4.1 Underground Mine

The underground mine development will comprise the following:

- An underground mine containing the mine workings, a secure explosives store, fueling and small service maintenance facilities, refuge stations, and associated exploration activities.

- A main decline (tunnel) that will be developed as the main access to the mineral deposit, extending from a portal at surface, near the processing plant.

- The existing adit (part of the existing approved exploration), originally developed for exploration in the 1980's and then extended by DGL will be retained to provide initial access for mine development while the main decline is being constructed. It will then provide secondary/safety access to the mine workings in the operational phase.

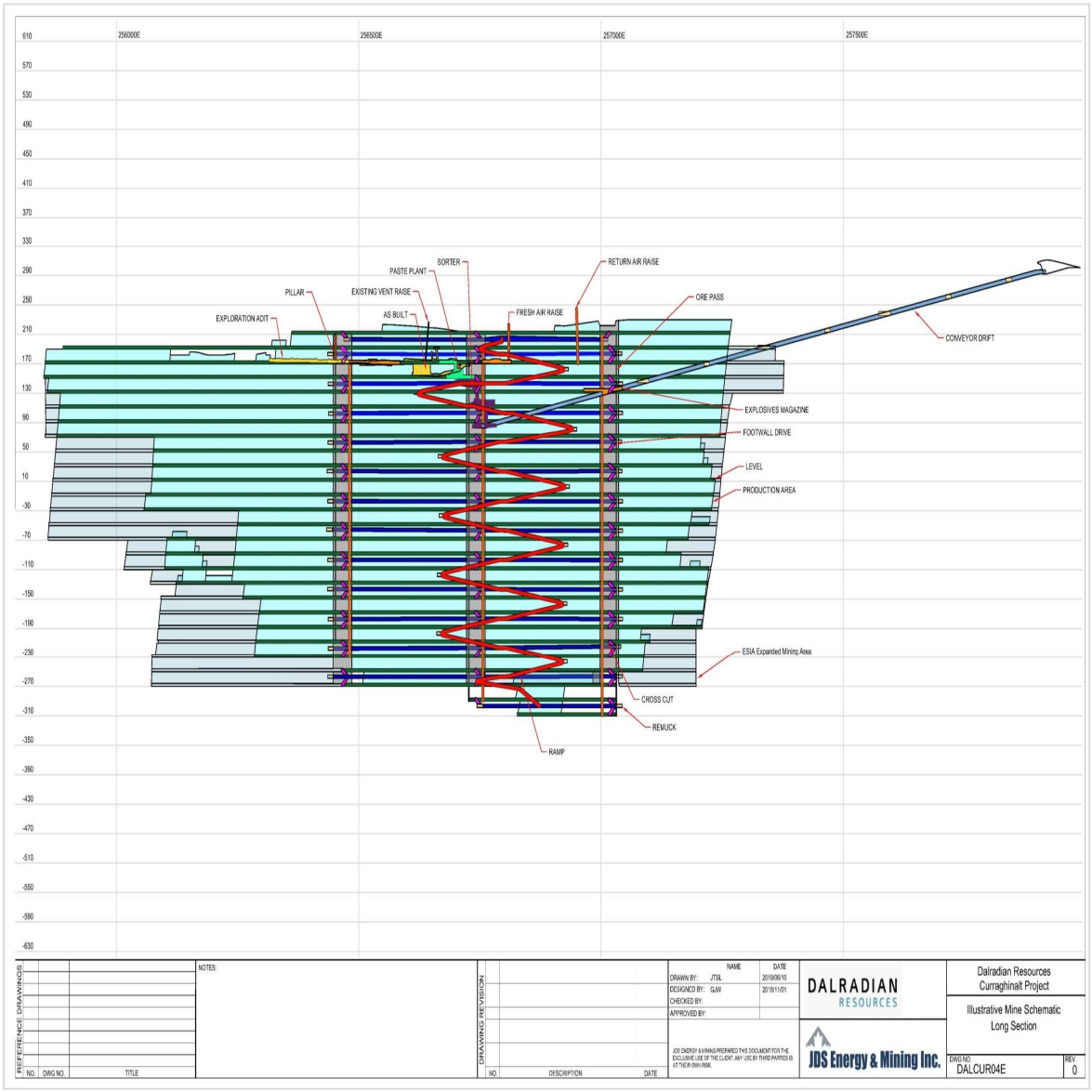
- Three ventilation raises (shafts) that will be used to ventilate the mine workings, one of which was developed as part of the existing approved exploration programme, and two of which will be new shafts constructed during the construction phase.

- Paste backfill, a cement-bound material that will be produced at a paste backfill plant underground and used to provide permanent support to the mine workings. The paste backfill will comprise some of the tailings from the flotation process, mixed with binders and cement.

The underground mine will be developed in accordance with the agreed Mine Design Parameters Statement (MDPS), Appendix B1 (2019) which will be conditioned and will also include the additional provisions set out in Annex A, attached. This includes the mine design criteria (including height width and gradient parameters for identified elements of the development such as ramps and ore passes); mining methodology (in respect of longhole mining, resue development mining, longhole uppers stoping) and cut and fill; means of access; underground crushing and ore sorting; conveyor haulage; ventilation; water supply; mine communications; fuel and lubrication depot; mine safety and geotechnical, geochemistry and groundwater reviews.

A schematic cross-section of underground mine is provided in Figure 4-1 below.

Figure 4-1 Underground Mine Schematic Cross Section (Showing Location of Key Underground Infrastructure)



4.2 Mine Access

Primary access to, and egress from, the mine will be via the main decline from the surface, refer to Figure 3-1 above. The decline would be accessed from the surface via the portal entrance. It will comprise a tunnel (c. 5.5-metre-wide x 5.5 metre high) at a maximum gradient of -15%. The decline will be connected to the underground mine workings that provide access to the mineralised veins to be extracted. A main conveyor will be installed during the development of the decline. On completion, the conveyor will be commissioned to transport material to surface during mine operations, thereby reducing the need for truck traffic on the decline.

Secondary (alternative) access and egress will be via three ventilation raises and the existing exploration adit. The existing exploration adit and its portal will also be used to provide an access point to the mine (and for training purposes) while the main decline is constructed.

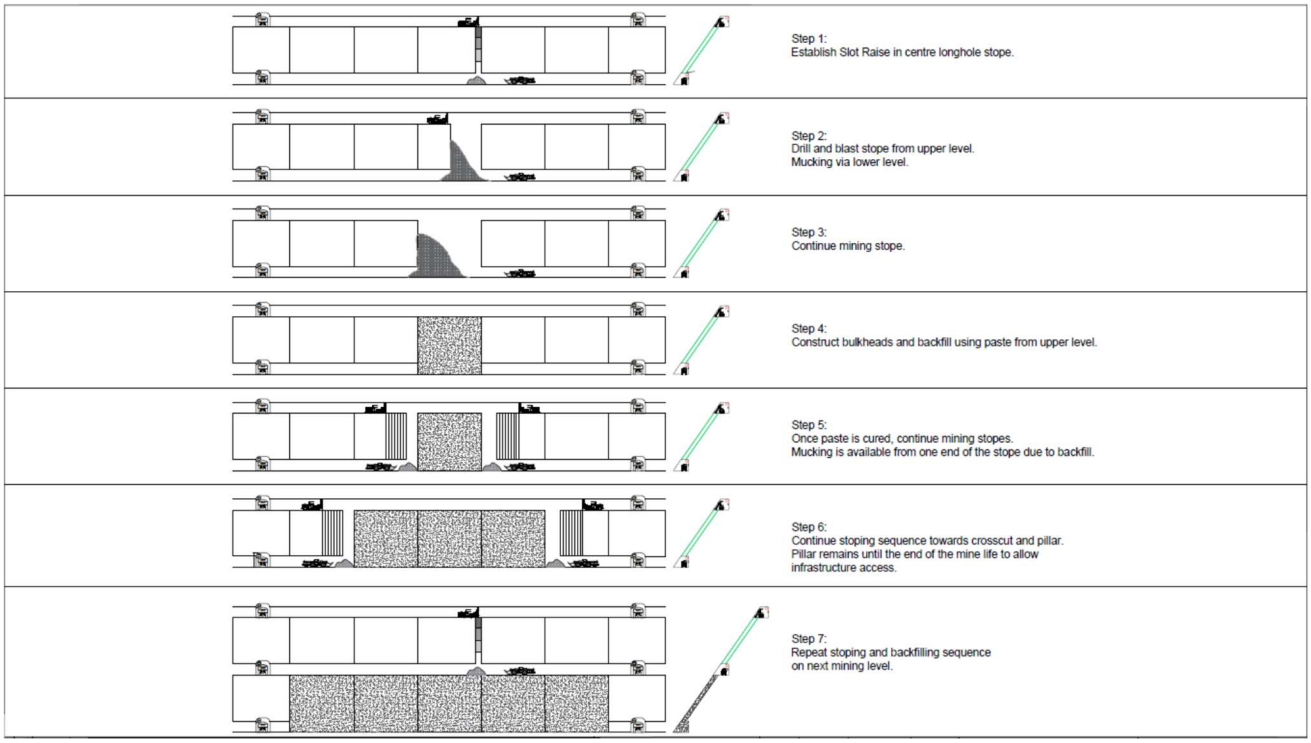
4.3 Mine Operations

4.3.1 Mining Method

The mining method will use established mining techniques for extraction from narrow vein mineralised deposits, as detailed in the MDPS[10]. From the main decline, access across the ore body/vein system will be via 3 cross-cuts (moving in the horizontal plane). The cross-cuts will be 4m x 4m and developed in a single round, and a series of ramps/circular declines, refer to the MDPS[11] for further details.

The mining methods will involve a repeated cycle of drilling, blasting, mucking out (ore / waste rock) and backfilling (with paste backfill / waste rock). Typical details of this cycle for one of the mining methods – Longhole Open Stoping is shown in Figure 4-2 below.

Figure 4-2 Typical Mining Cycle - Longhole Open Stoping Mining Method



Similar to the Curraghinalt approved exploration activities carried out for the bulk sampling, drilling and blasting will be used to fragment the mineralised veins. Blasting will normally occur at the end of each shift, i.e. two blasts per day. The blasts in the mine workings will be designed to minimise vibrations on surface. Due to the narrow veins being mined, blasts will be relatively small by underground mining standards. The explosives used will primarily be bulk emulsions with various detonators.

[10] Appendix B1 Mine Design Parameter Statement (MDPS), 2019.
[11] Appendix B1 Mine Design Parameter Statement (MDPS), 2019.

Blasted waste rock(un-mineralised material) and ore (mineralised material) from the underground mining activities will be loaded by rubber tyre low headroom (LH) units into articulated haul trucks for transportation to designated processing, storage, or backfill areas.

The initial mine development will use the existing explosives magazine located on surface south of the existing exploration adit and a temporary explosives magazine will be located at the new portal laydown area. This will enable construction of the mine main decline in two directions from the existing exploration adit and the surface infrastructure site , meeting in the middle to complete the decline. A new explosives magazine will be constructed in the underground mine once sufficient development is completed. The design of the magazine and associated access procedures will continue be carried out in accordance with the requirements set out by the Department of Justice (Firearms and Explosives Branch) (DoJ), Police Service of Northern Ireland (PSNI) and the Health & Safety Executive (HSE). As with the approved extension of the exploration adit the storage and use of explosives will be carried out in accordance with the Approved Code of Practice (ACOP) and other relevant regulatory requirements provided by the DoJ, the PSNI and the HSE. As with the exploration bulk sample activities all blasting operations will be monitored to demonstrate compliance with the groundborne vibration limit values set out in conditions attached to any planning permission.

Typical drilling equipment and low headroom (LH) vehicle for mucking out operations used in the underground mining are shown below.

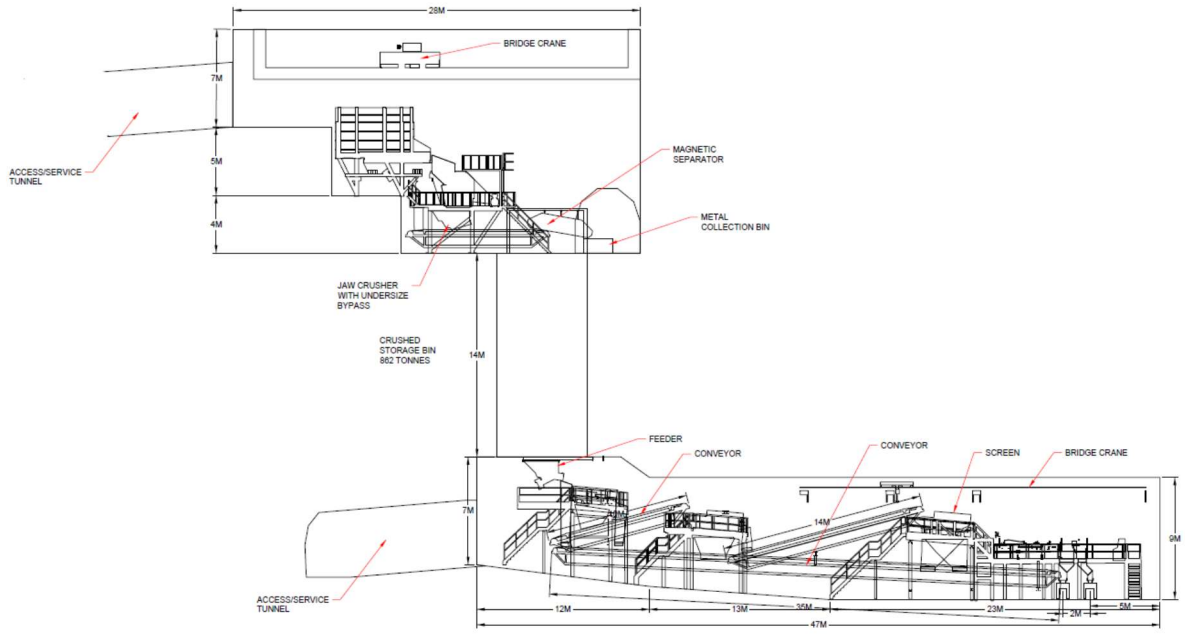
Underground Mining - Typical Drilling Equipment

Underground Mining - Typical Low Headroom (LH) Vehicle

4.3.2 Underground Crushing & Ore Sorting

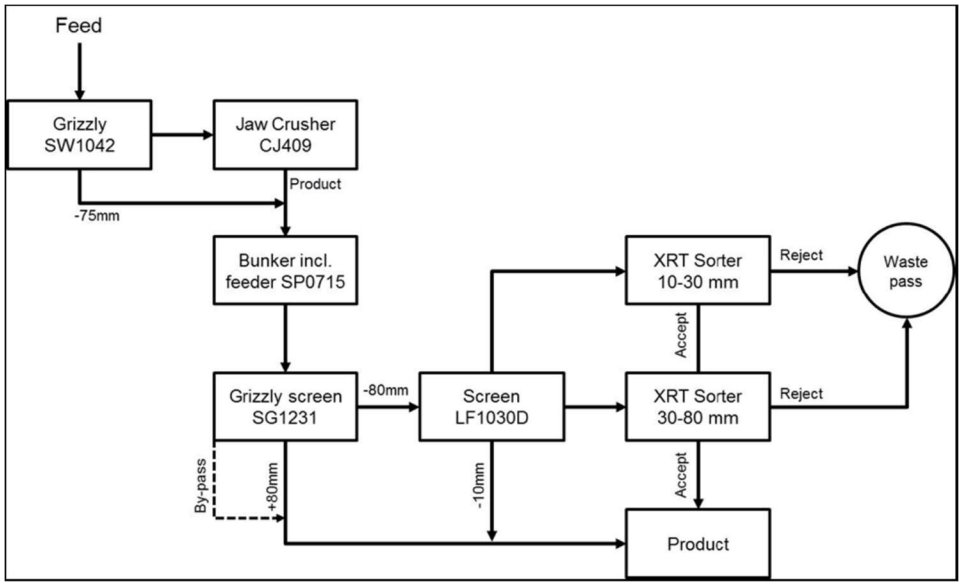
Fragmented material comprising waste rock (un-mineralised material), and ore (mineralised material) will be loaded by rubber tyre load-haul-dump (LHD) units into articulated haul trucks for transportation to underground primary crushing and ore sorting plant. Details of the underground plant layout are shown in Figure 4-3 below:

Figure 4-3 Underground Crusher, Screen & Ore Sorter



Once the fragmented material is crushed and screened it will be separated in the ore sorter into mineralised ore (product) and waste rock, refer to underground processing flowchart in Figure 4-4 below.

Figure 4-4 – Underground Processing Flow Chart



The mineralised ore and waste rock will be stored in separated underground storage bins prior to being transferred to surface via the main conveyor in the decline.

The underground crusher and ore sorter units will incorporate dust abatement measures as will all of the conveyor transfer points.

4.3.3 Waste Rock & Paste Backfill

Consistent with mining best practice, waste rock and paste backfill will be used in the underground mine workings, both to provide support in mined-out areas and to reduce the quantity of mine waste to be managed on surface. The paste backfill plant will be located underground within the mine, refer to Figure 4-1 Underground Mine Schematic Cross Section.

Approximately 70% of the waste rock generated during mining will be used as backfill material underground. Waste rock will be placed as backfill in mined-out areas by trucks and/or LH vehicles. The remaining waste rock will be placed in the mine waste facility, referred to as the dry stack facility (DSF). Potentially acid forming waste rock, should any be identified, will be mixed with the cement paste backfill and placed in mined-out areas below the final water table rebound levels.

Tailings (arising from the surface processing facility) will be pumped underground via a pipeline located in the decline to the underground paste backfill plant. The tailings will be mixed with cementitious binders (e.g. cement and / or cement substitutes (granulated blast furnace slag) in the paste backfill plant. The resulting cement paste will be pumped into mined-out areas where it will cure / solidify and provide permanent support. The cementitious binders will be transferred to the underground paste backfill plant pneumatically via the existing exploration adit. The tankers delivering the binders will park outside the adit portal and connect to the binder distribution pipe leading to the paste backfill plant.

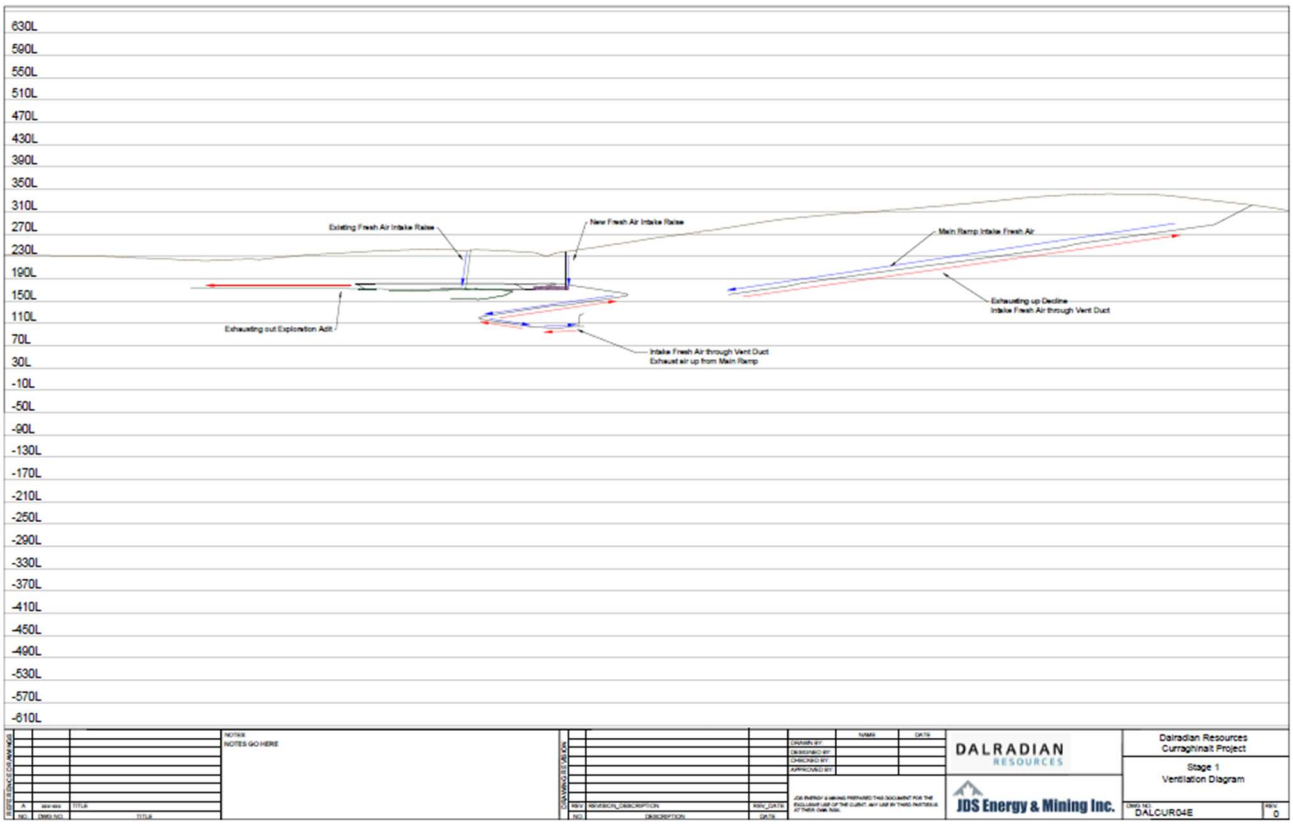
4.4 Mine Ventilation

Air flows into and out of the mine will take place via the existing exploration adit, the main decline, the existing ventilation raise, and two additional ventilation raises, refer to the locations shown in Figure 3-1 . The new ventilation raises will be 4 metres by 4 metres in cross-section and include a surface structure less than 3 metres in height. SafeScape Ladder Tubes (or similar) will be installed in each of the raises for secondary egress.

Fresh air will be directed to the active mining levels through the existing exploration adit and two fresh air intake ventilation raises (the existing ventilation raise and one of the new ventilation raises). Exhaust air will be directed out of the mine via the decline and one of the new ventilation raises, refer to Figure 4-5 below.

The mine ventilation network will include primary ventilation fans; secondary fans; and auxiliary fans. The primary ventilation fans will comprise two 2 metre diameter underground mine fans. Each fan will feed a separate fresh air intake ventilation raise. Local ventilation within the mine workings will be controlled by secondary, auxiliary fans, and ducting.

Figure 4-5 Underground Mine Ventilation



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4.5 Mine Water Management

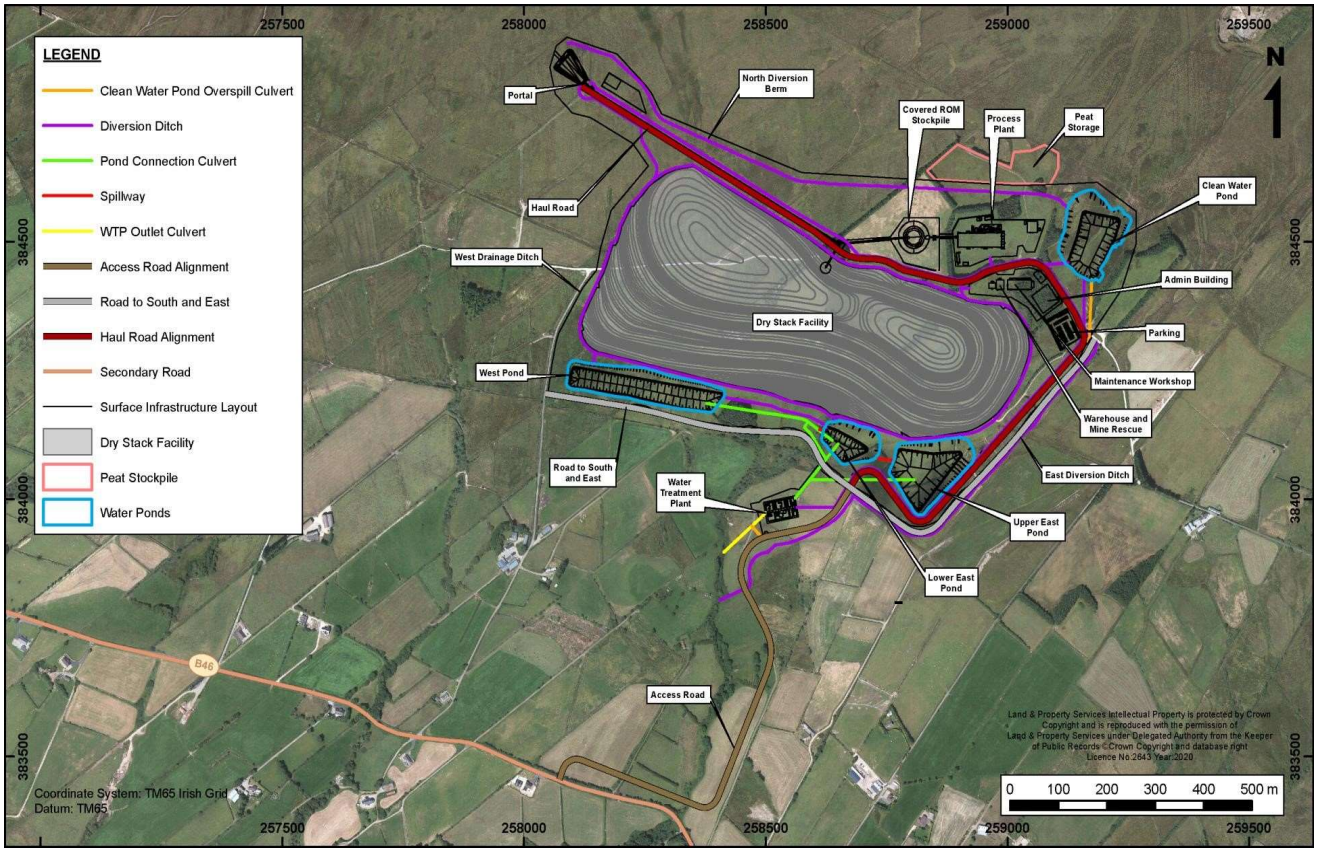
Ground water flowing into the mine will be collected on each of the cross-cuts. As there are two levels accessed per footwall drive, the lower level has drain holes drilled into the cross-cut of the level below. This simplifies the need for pumps. Gravity is used to collect the water in sumps on each level and feed into larger pumping stations. A total of six pumping stations will be installed. Water from each of the pump stations is fed into piping and sent to the next pump station. Pumps, designed to handle up to 10% solids, will deliver water from the pump stations to the mine portal where it will be used in the process plant or sent to the water management ponds, refer to Figure 5-1 Site Infrastructure Plan below.

5.0 Surface Infrastructure

The surface infrastructure plan is shown on Figure 5-1 below and will comprise the following:

- Main decline portal: surface access point to the underground mine via the main decline;
- A minerals processing plant including covered ore stockpile and process plant building;
- Mine waste facility – including a dry stack facility (DSF) with some of the tailings from the processing plant after they have been dewatered by means of a filtration process, some waste rock from development of the mine, and related water management infrastructure;
- Water management infrastructure including drainage channels, clean water storage pond and water treatment plant;
- Ancillary infrastructure and services required to support the activities, comprising administrative buildings; a maintenance shop; warehouse facilities; chemical and explosive stores, employee changing facilities, parking, site roads, and water supply;
- Connections to offsite infrastructure, including the Northern Ireland road network and the electrical grid (refer to Figure 9-1).

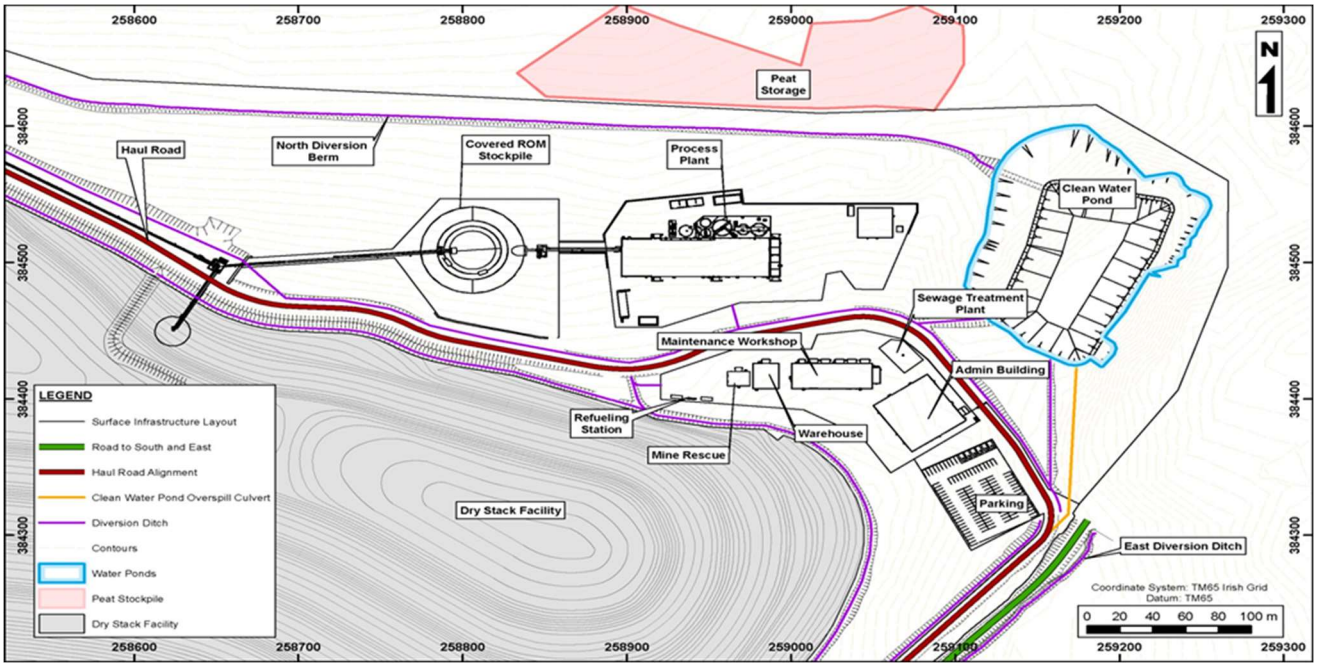
Figure 5-1 Surface Infrastructure Plan



6.0 Mineral Processing

Crushed ore material from underground will be transferred via a covered conveyor to a covered dome - Run-of-Mine (ROM) stockpile, on the surface, holding 2 to 3 days of feedstock for the processing plant, refer to Figure 6-1. The stockpiled material will then be transported via covered conveyor to the grinding area within the process plant building. There will be a two-stage grinding process. The grinding mills use grinding media (steel balls) and water to grind the feed into a slurry of finer particles. This fine particle slurry will then flow to the flotation circuit by gravity. During flotation concentration, the slurry will be conditioned with flotation reagents that promote the gold, silver, copper and the other metal-bearing minerals in the slurry to float, allowing them to be separated from the bulk of the slurry.

Figure 6-1 Mineral Processing Plant – Plan Layout



The concentrates from the flotation process will be pumped to the concentrate thickener prior to the concentrate filtration and bagging facility. Final concentrate containing the gold and other minerals (including silver, copper, antimony, tellurium), will be bagged for shipment off-site. As a result of refinements to the process plant design between 2017 and 2019, no cyanide will be used in the process.

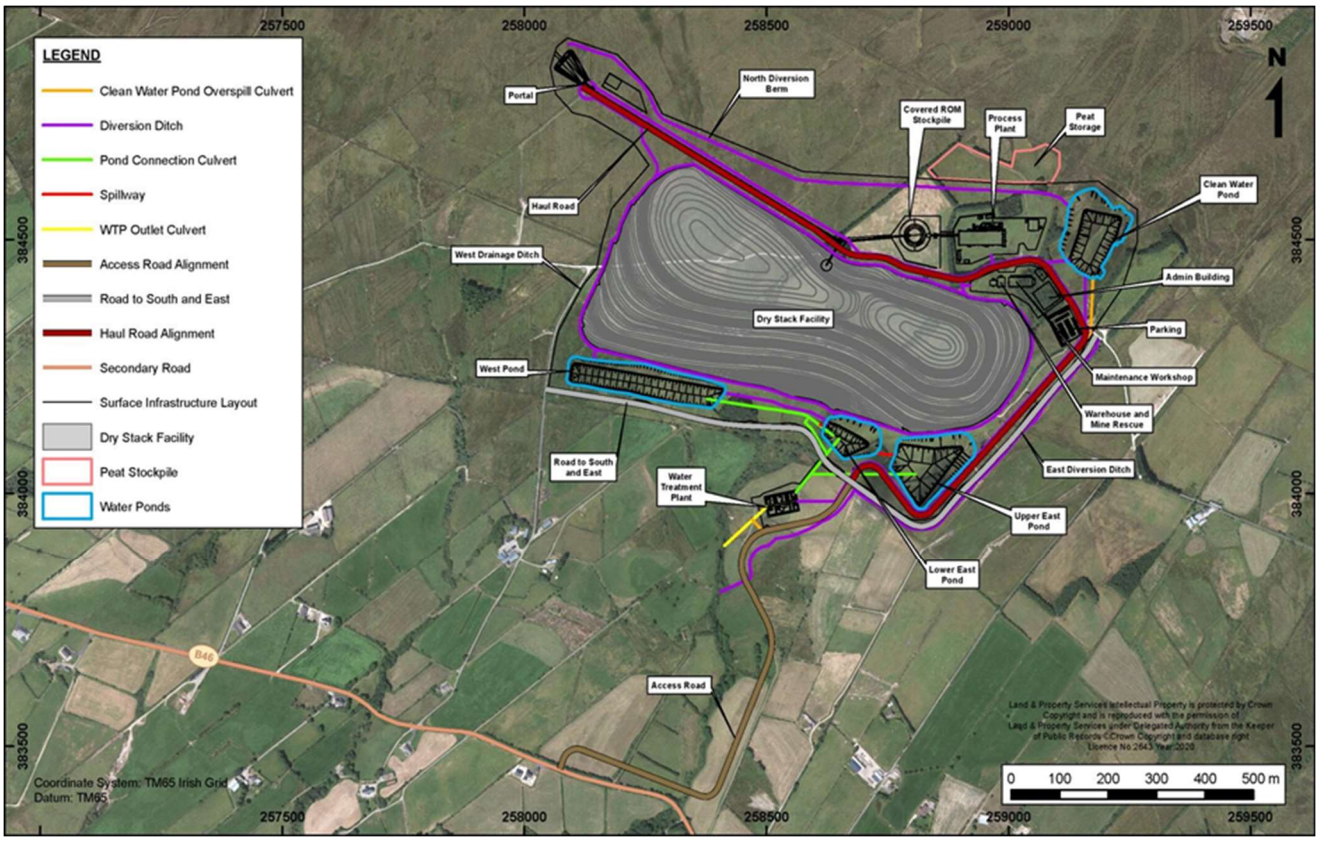
The flotation tailings will be pumped to the tailings thickener prior to either being pumped to the tails filter facility for dewatering and placement on the DSF, or pumped to the paste holding tank where they will be pumped to the paste backfill plant underground.

There will be approximately 60 tonnes of concentrate produced per day that will be transported off-site in heavy goods vehicles (HGV's).

7.0 Mine Waste Management

Mine waste comprising waste rock and tailings from the processing plant (not used as underground backfill during the mine operation) will be managed on surface within the mine waste facility. The mine waste facility includes the dry stack facility (DSF) and related water management infrastructure, refer to Figure 7-1 below and to the Mine Waste Technical Report[12] for further details. The DSF includes an engineered basal lining system to ensure protection of underlying groundwater and a water management system to collect, store and transfer surface water run-off from the facility to the water treatment plant.

Figure 7-1 Mine Waste Facility



Un-mineralised waste rock brought to surface during the construction phase will be used in the construction of the DSF starter embankment, noise berms, access road foundations and other hard standing areas. This material arising from the existing exploration adit (as the decline is being constructed) will be stockpiled and then re-loaded into HGVs. The HGVs will then transfer the rock to the proposed infrastructure site, travelling from the existing exploration site along the Camcosy Road to Crockanboy Road and then onto the site access road.

During operation, waste rock and ore sorter rejects brought to the surface will be placed in the DSF. The DSF will be used to store the portion of the waste material underground that does

[12] Technical Report – Mine Waste (SRK, October 2024)

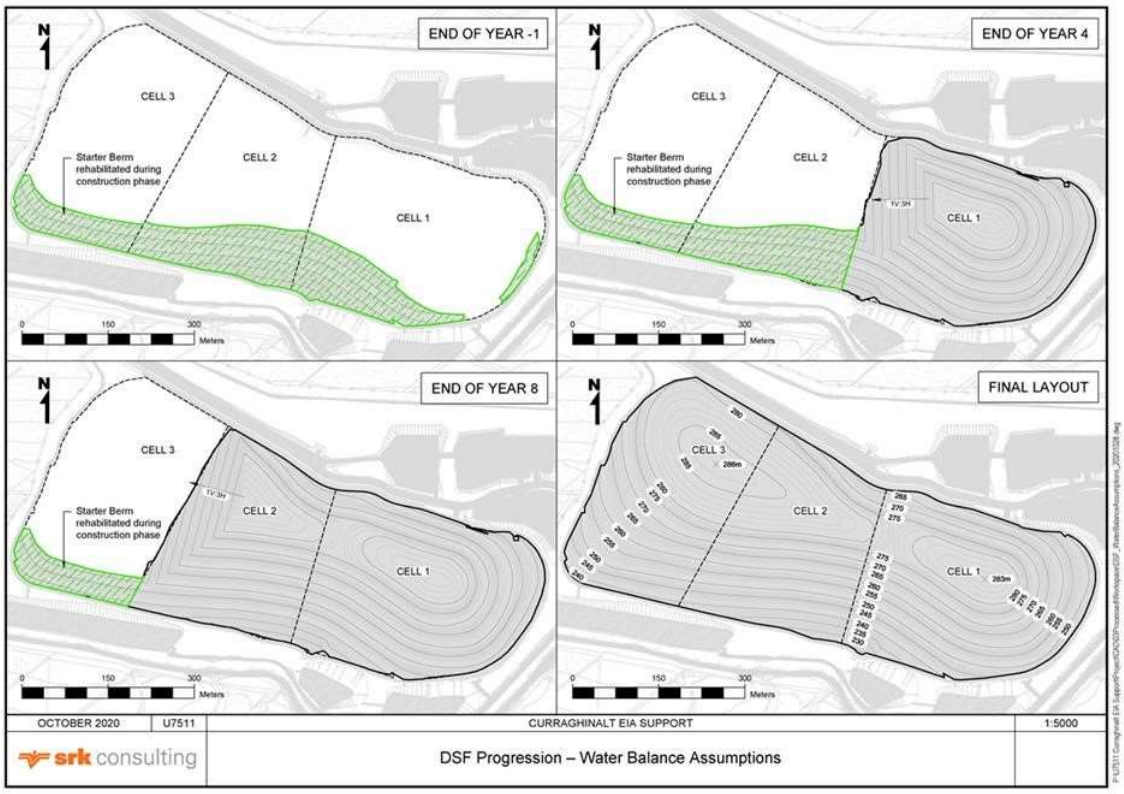
not report underground for use as backfill. It will also contain filtered tailings from the flotation stage of the process.

The DSF has been designed to hold 4.8Mm^3 of waste rock, ore sorter rejects and flotation tailings material. It will be located on the hillside immediately downslope of the processing plant site and on completion will have a footprint of 28 hectares.

The “dry stack” (filtered tailings) method of tailings disposal is consistent with the best international tailings management practice. It also minimises the extent of the facility surface footprint and supports progressive restoration. Waste rock and ore sorter rejects would be used to buttress the perimeter slopes, construct drainage systems and provide internal access roads as required. Waste rock quantities over and above that required for these uses would be incorporated into the main part of the DSF. Topsoil and peat cleared from the land during early construction will be used as restoration material on the DSF slopes and across the wider site.

The DSF has been designed to be built from the bottom up, by placing filtered tailings in thin compacted lifts (0.3m maximum thickness). The overall slope gradient has been designed to 3 Horizontal (H) to 1 Vertical (V) - 3H:1V on the south side and 2.5H: 1V on all other slopes. Restoration of the external slopes will be undertaken on a progressive basis as the starter embankment (toe drain) and external berms are constructed, refer to Figure 7-2 below. An engineered cover system will be installed progressively on the landform as each area of the DSF is filled to capacity. The engineered cover has been designed to reduce water infiltration and includes a topsoil layer amenable to revegetation.

Figure 7-2 DSF Phased Development



8.0 Water Management

The overall water management for the Curraghinalt Project is shown in Figure 5-1 Surface Infrastructure Plan above and can be summarised as follows:

- The capture, storage, and treatment of all water in contact with mining activities/infrastructure (contact water), which could have poor water quality both on surface and underground. Three contact water ponds are provided as part of the surface infrastructure – West Pond; Lower East and the Upper East Pond. These include provision of suitable freeboards and contingencies to prevent uncontrolled spills;
- The limitation of natural runoff from outside the proposed infrastructure site contacting mine infrastructure by use of diversion channels, thereby reducing water volumes needing to be treated, refer to Figure 5-1 Surface Infrastructure Plan above;
- The capture of clean (non-contact) surface water runoff from upslope of the proposed infrastructure site to the Clean Water Pond. This water will be available for use as freshwater in mining operations. Mineral processing requires freshwater input. Most of the water used in the processing plant is recycled within the plant or is sourced from groundwater from the underground workings (i.e. water that has contacted mined material is suitable for most purposes in the processing plant). However, some freshwater will be required for the process. This freshwater will be obtained from either the Clean Water Pond or treated water from the site water treatment plant.

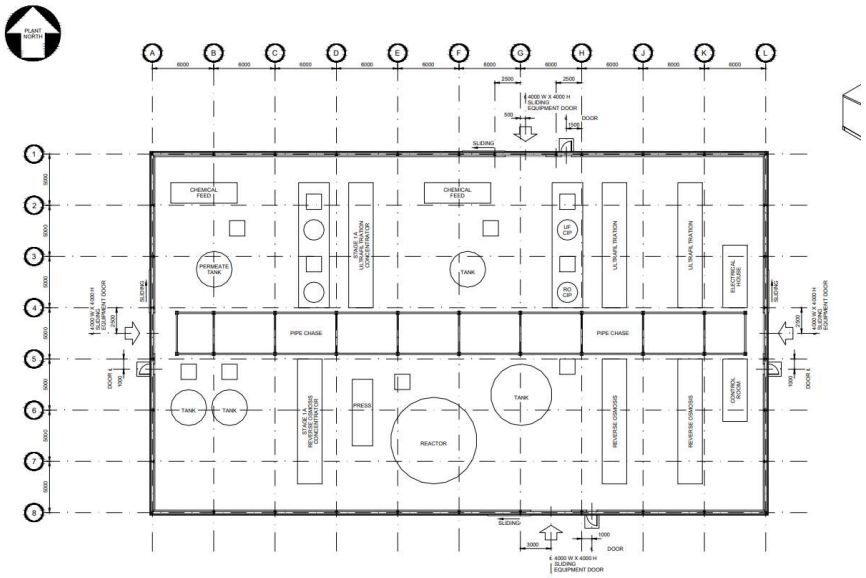
Refer to the Water Technical Report (Water Management Infrastructure Design Report[13]) for further details.

8.1 Water Treatment Plant

A water treatment plant (WTP) will be located to the south of the East and West Water Ponds, refer to Figure 5-1 Surface Infrastructure Plan above. The treatment plant will use best practice reverse osmosis (RO) technology, with a two stage RO system to meet water quality requirements at the site. The proposed system would include a crystalliser to limit the volume of the plant effluent. Solid residue would be transported off-site for disposal by a registered waste management company. The treatment plant would be capable of treating 300 m^3/hour which would provide excess capacity to help manage water flows between different areas of the site. The WTP will be fully enclosed, refer to Figure 8-1 below:

[13] Technical Note – Water Management Ponds & Ancillary Water Infrastructure (SLR, September 2024), Appendix to Technical Note – Surface Water

Figure 8-1 Water Treatment Plant



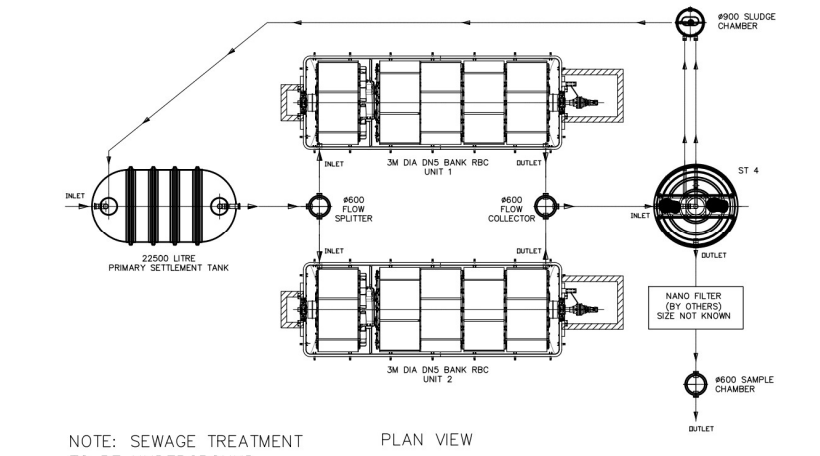
Treated water will be discharged to the Pollanroe Burn through an outfall close to the treatment plant. There would also be the potential to pump treated water to the process plant to be used as make-up water and/or to pump water to the Clean Water Pond if water levels in the pond were low.

8.2 Sewage Treatment Plant

A sewage treatment plant (STP) will be constructed to service the surface ancillary offices and welfare facilities, refer to Figure 6-1 above for the STP location.

Treatment will be based on a modular layout with the following main components to achieve discharge criteria: primary settlement tank, splitting chamber, rotating biological contactor, collection tank, final settlement tank, nano filtration system, UV sterilisation and a sampling chamber, refer to Figure 8-2 below. The treated sewage outfall will discharge to the Upper East Pond and pass through the main WTP prior to being discharged or recycled. Sludge will be temporarily stored in the primary stage and will be periodically transported off site for treatment.

Figure 8-2 Sewage Treatment Plant



8.3 Water Supply

A water supply and distribution system will support the operational water requirements, prioritising the recycling of process water and minimising the overall requirement for fresh water.

Potable water will be supplied to the site by Northern Ireland Water (NIW) via a NIW mains connection. The potable water will be distributed to the administration building, change rooms, maintenance complex, assay laboratory and first aid and emergency facilities.

8.4 Site Access

The site for the Project is located off the B46 Crockanboy Road, Gortin, Omagh. The proposed access to the Project would be via a proposed new right turning lane arrangement off the B46 Crockanboy Road, refer to Figure 8-3 and Figure 8-4 below. It would be designed in accordance with DMRB TD 42/95 standards and DCAN 15: Vehicular Access Standards.

During the construction phase of the proposed development, the existing surface infrastructure site, off the Camcosy Road will be retained. This is to allow underground blasting from the north of the site until the access off the Crockanboy Road is complete and the underground works link. Following the construction phase, it is expected that the existing surface infrastructure site located off the Camcosy Road will continue to have a limited use associated with the main project site

Figure 8-3 Road Network

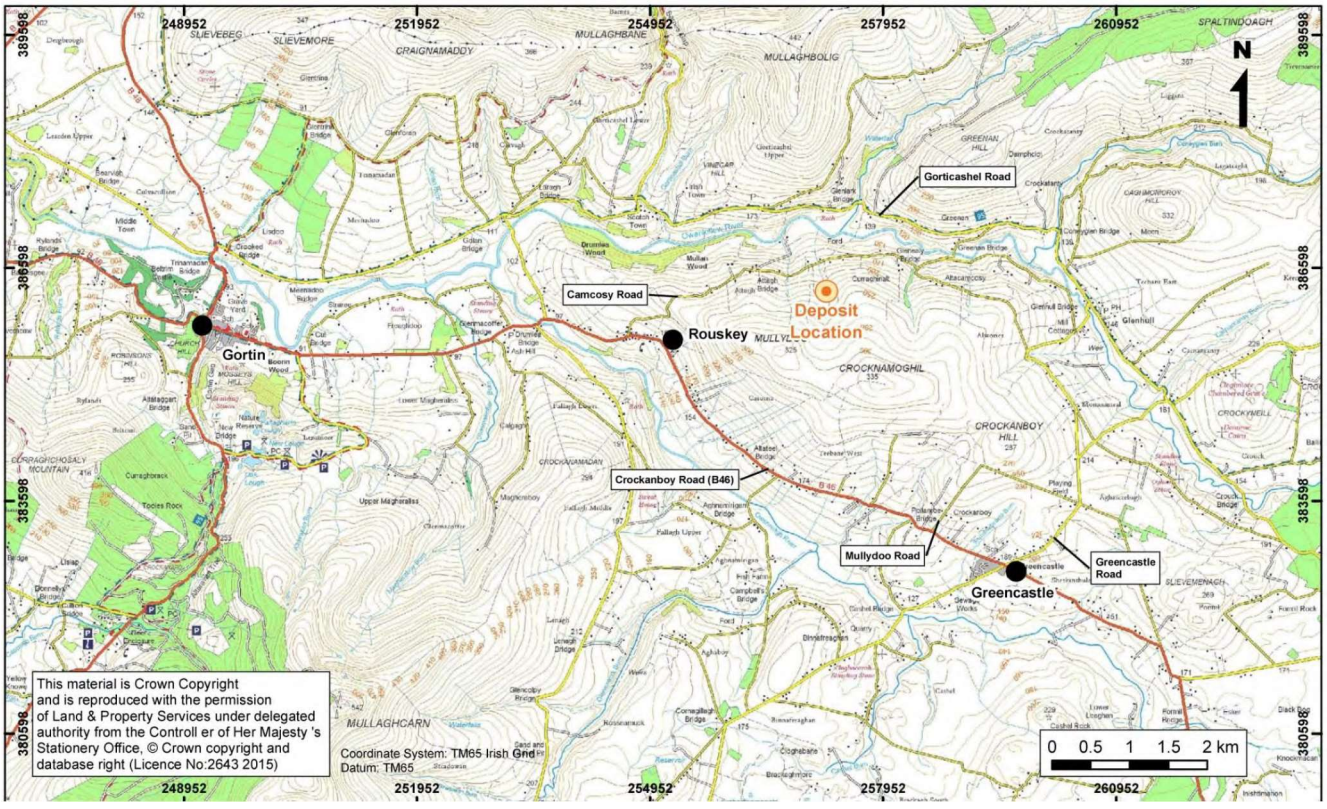
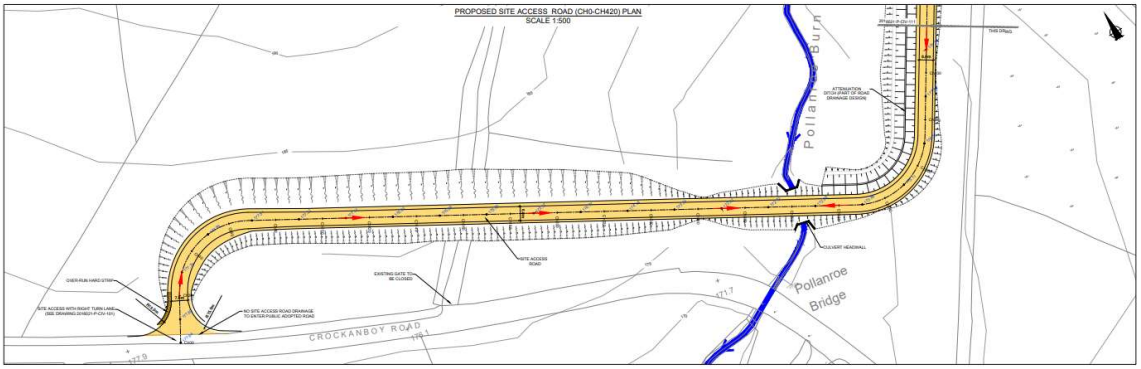


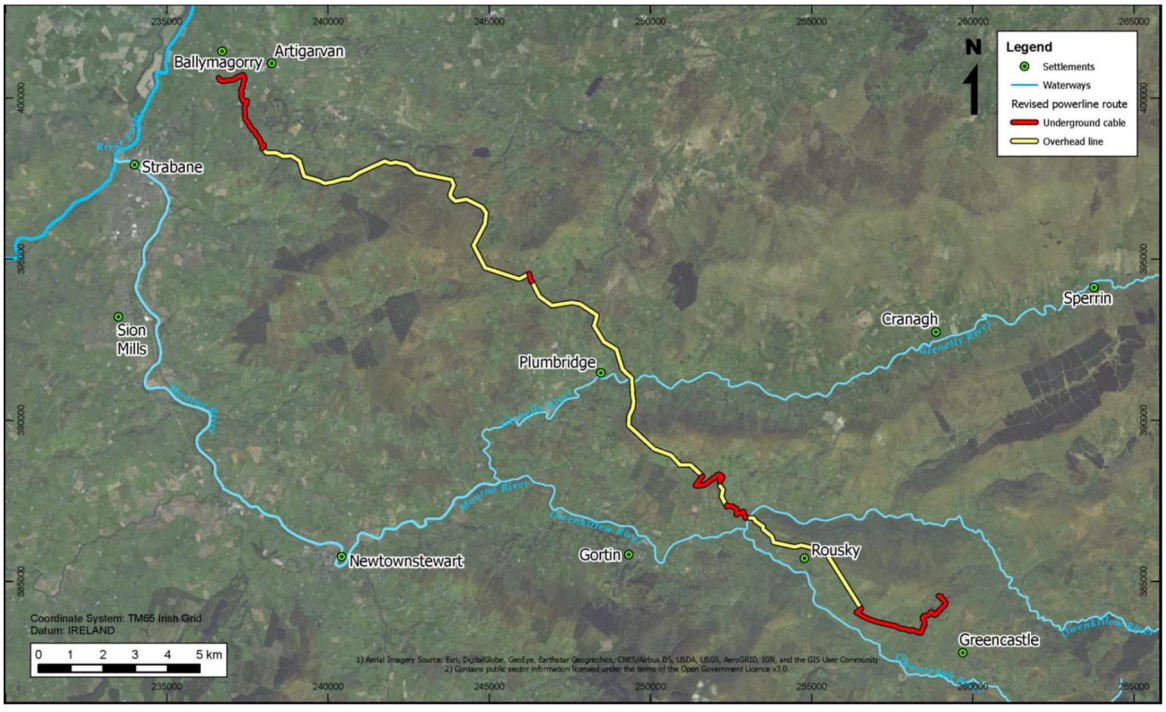
Figure 8-4 New Access off the B46 Crockanboy Road,



9.0 Off-Site Power Infrastructure

Power will be supplied to the site by connecting to the regional electricity grid. A new 33 kV distribution power line from the Strabane 110/33 kV substation (which is located approximately 3km northeast of the town of Strabane, County Tyrone) will be developed by NIE Networks to supply power to the site, refer to Figure 9-1 below. The proposed 33kV connection is 37.9 km in length, comprising 26.9 km of overhead line (OHL) supported by single and double wooden pole sets and 11km of underground cable (UGC). The NIEN distribution system will also include the switchgear and circuit breakers necessary to receive power at site and new switchgear and circuit breakers at the 110/33 kV main substation in Strabane.

Figure 9-1 Location of Off-Site Power Line Route



10.0 Closure & Post Closure

The general objectives of the closure and rehabilitation of the mine site will be to ensure public safety and reclaim the land to a usable condition consistent with surrounding land use objectives. The current objective is for the land to be restored to productive use for farming and/or heathlands, but alternative land uses will be considered and discussed with regulatory authorities and other stakeholders during the future detailed closure planning process, refer to the Closure Technical report[14] for further details. The chosen land use will aim to be consistent with the landscape character and scenic value of the Sperrin Mountains Area of Outstanding Natural Beauty.

A conceptual closure and rehabilitation plan has been prepared. The plan will be reviewed periodically though the life of the project and updated, in consultation with regulatory authorities and other stakeholders. Closure planning will be further developed as the project engineering process continues.

The following general principles will be applied as minimum standards:

- Underground openings will be plugged and secured, and underground workings will be allowed to flood. Potentially acid generating waste rock used for backfilling of the underground workings will be submerged as the groundwater levels recover. This will minimise future oxidation and metal release;
- The DSF containing non-acid generating waste rock and tailings will be progressively reclaimed during operation. The facility will be contoured and covered and revegetated in character with the surrounding landscape and agreed final land use;
- Topsoil and peat that has been stripped during construction and conserved during operation will be used during the rehabilitation works;
- The RO WTPs will continue to be operated until it has been demonstrated the passive treatment systems can ensure the agreed discharge standards can be met. If required, the passive systems will make use of the water management ponds at the proposed infrastructure site and the lagoons at the existing surface infrastructure site;
- With the exception of the NIE substation, all surface infrastructure, utilities and machinery will be removed from the site. The electrical substation is considered an infrastructural asset by NIE and may be left in place post-closure and owned by the utility;
- Facilities and buildings will be decommissioned and demolished. Concrete foundations will be broken up and removed from site, reclaimed if possible, or taken to a certified waste disposal facility;
- All disturbed areas will be re-contoured, covered in topsoil where required and revegetated;
- Any hazardous and contaminated materials will be removed from site to licensed waste facilities.

In accordance with the Planning (Management of Waste from Extractive Industries) Regulations (Northern Ireland) 2015, the mine waste management plan submitted for the

[14] Technical Report – Closure Plan (SRK)

project includes a description of the proposed plan for closure of the DSF including rehabilitation, after-closure procedures and monitoring. A financial guarantee will be provided by DGL and secured by way of a planning agreement to ensure that all conditions on the planning permission pertaining to the management of extractive waste, including after-closure conditions, are met and there are funds readily available at any given time for the rehabilitation of the land affected by project infrastructure.

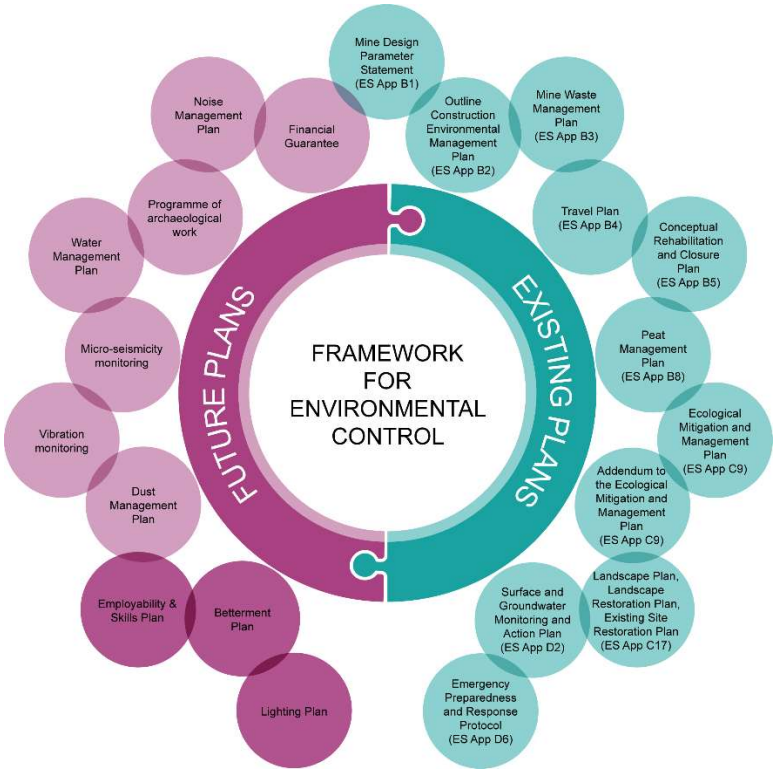
The mine closure and rehabilitation activities will take approximately one year to complete from the cessation of mining and processing operations. This will be followed by a period of post-closure monitoring to demonstrate that the site is stable and has achieved the agreed closure objectives in accordance with relevant legislation.

11.0 Environmental & Social Management, Controls and Monitoring

The Project has been subject to a detailed environmental impact assessment (EIA). An extensive programme of environmental management, mitigation and monitoring will be implemented by DGL over the lifetime of the Project, as set out in the Environmental Statement Chapter 10 – Environmental & Social Management Plan ("ESMP") and the additional plans detailed in Figure 11-1 below:

DGL will implement an Environmental & Social Management System (ESMS) for the Project. The ESMS will be implemented for the construction, operational and closure/ decommissioning phases. Care will be taken to harmonise DGL's ESMS and procedures with those of its contractors, particularly during the construction phase. All applicable plans will be secured by condition so as to ensure a high standard of environmental controls over the Project.

Figure 11-1 Management & Monitoring Plans



Annex A

Changes to be brought forward in final approved version of the Mine Design Parameters Statement (App B1A-2019)

Update to Section 5 on underground crushing and ore sorting to incorporate water mitigation measure recommended in the ESMP (Chapter 10 of the 2017 ES)(new words underlined)

Accepted material from both sorters will be combined on the collecting conveyor onto the product conveyor. The product conveyor exits the process island and drops material into a stope where it can be collected and transported to the next processing stage. Reject material from both sorters will be combined on a waste conveyor. The waste conveyor will end in a waste pass. Mineralised waste rock not sent to the mill will be mixed with paste backfill in the underground workings.

New section 13 to cover Exploration Methodology

13. EXPLORATION METHODOLOGY

In parallel with mining, DGL will also continue the programme of exploration of the Curraghinalt mineralisation and thereby maximise the benefits from the full resource. This will involve developing a number of underground exploration adits off the main working area.

Access will be primarily via the new portal and main ramp with occasional access from the existing exploration adit. The ventilation system, water supply system and mine communications network for the mine will extend to the exploration workings. Sections 11 and 12 above will also apply to the explorations activities.

Exploration workings will not extend beyond 1400 m in an east and south-east direction from the main underground workings in the direction of Alwories. Any exploration activity will be within Areas B and C as described and shown in Chapter 1 of the ES (2017).

The exploration drives/ tunnels will be excavated into fresh bedrock below the transition layer of weathered rock at a depth of 100 m or greater.

The exploration adits will only comprise open tunnelling and drill bays. Each tunnel will be near horizontal with a slight gradient to ensure drainage. The lowest point of each level will contain a sump for collection and removal of water.

All water producing fractures intercepted in the exploration tunnels and drill holes will be fully grouted immediately after completion of hydrogeological related tests. There will be no mineral extraction for production from the exploration areas, and these open areas of the mine will be resealed with bulk heads upon completion of the exploration work and the working flooded to minimise oxidation and deep mine water recharge.

DGL will also continue to explore the extent of the mineral resource at depth. Exploration is proposed around the underground mine within the exploration boundary and beneath the underground mine (up to 200 m below the 700 m below ground level extraction depth).

Exploration will comprise tunnels, drill bay and drill holes. As with the lateral exploration described above, the same mitigation measures will be applied to limit water flows into the exploration works. The exploration tunnels will also be sealed on completion of the exploration test work.