



KUDZ ZE KAYAH PROJECT

PROCESS PLANT DEVELOPMENT AND OPERATIONS PLAN

REV 04

June 2026

BMC MINERALS LTD.

This Management Plan has been developed to meet the appropriate subject objectives based on existing regulatory requirements, current or planned site activities, existing and expected site conditions, and designed outcomes at the time of writing. Operational processes/practices for achievement of licence terms and conditions may be updated from time to time as appropriate due to changes to relevant legislation and regulations, changes to site activities or conditions, differences from expected objective outcomes, or improvement of management practices. All rates, capacities, dimensions, weights, volumes and durations in text or figures are based on current feasibility level designs and are subject to change based on final design, licence conditions or site conditions encountered. Updates will be resubmitted to government authorities and/or stakeholders as required.

LIST OF REVISIONS

Issue Date	Revision Number	Description of Revision
August 25, 2020	Rev 00	For Issue to Agencies
November 19, 2020	Rev 01	Updated with commitments and Final Screening Report Recommendations
July 18, 2022	Rev 02	Update with final edits from BMC review
June 5, 2024	Rev 03	Updated in response to IR#4 from EMR dated June 9, 2023
June 1, 2026	Rev 04	Administrative updates in response to EMR completeness check

SUMMARY OF REVISIONS

Information Request/Intervention	Document	Exhibit	Section	Revision
EMR Phase 4 IR This plan has many procedural and processing requirements associated with the safe operation of the process plant and auxiliary facilities, each of which will require an SOP. All associated SOPs are required to be appended to this plan. Append associated SOPs to the plan.	Process Plant Development & Opps Plan	1.15	Appendix A	A list of the procedures that are expected to be developed for the safe operation of the plant have been included as Appendix A to the plan.
EMR Phase 4 IR A concordance table is missing from the plan. BMC is to provide a concordance table that demonstrates how all applicable decision document terms and conditions and proponent commitments have been addressed. This concordance table should also indicate where revisions have been made based upon the information requests outlined in this table.	Process Plant Development & Opps Plan	1.15	n/a	The concordance table has been added.
EMR Phase 4 IR Section 2 - Site Preparation This section is generally vague and needs additional information such as extent of footprint, clearing and vegetation, foundation prep and containment measures/features, frozen material management, etc.) BMC to acknowledge the comment with revised wording in the next plan submission.	Process Plant Development & Opps Plan	1.15	2	Additional information has been added to Section 2 to detail the extent of the footprint for the process plant and other infrastructure, foundation preparation, frozen material management and containment measures.
EMR Phase 4 IR Section 2 - Site Preparation The plan states Overburden that is assessed as being suitable for construction purposes. Suitable material has not been defined in the QML application. The best place for this information is likely in the Mine	Process Plant Development & Opps Plan	1.15	2	A reference to the Mine Development and Operations Plan has been added to Section 2.

Information Request/Intervention	Document	Exhibit	Section	Revision
Development and Operations Plan, but should be referenced where construction material is mentioned. BMC to provide reference to where suitable construction material is classified and defined. BMC to indicate what is suitable and produce specifications for construction materials within broader QML application/ more applicable plans.				
EMR Phase 4 IR Section 2 - Site Preparation It is unclear what is meant by or the reason for "all heavy equipment will be located directly over bedrock". Clarify statement and it's reasoning.	Process Plant Development & Opps Plan	1.15	2	The intention of this statement was to note that major heavy equipment such as the grinding mills will have foundations sited directly on bedrock. To avoid confusion this has been removed from the text.
EMR Phase 4 IR Table 2-1 - Estimated Volumes of Material for Process Plant Site Preparation The plan states "Estimated volumes of materials that will be excavated and placed to construct the surface for the Process Plant and associated infrastructure are summarized in Table 2-1." Table 2-1 indicates volumes for different material types, but does not specify if it is a removed, placed or a combination of both. Clarify the estimated volumes of each material that will be removed or placed for site preparation. For material being removed, indicate where that material will be stored. For material being placed, confirm the placement meets the necessary specifications for foundation and site preparation.	Process Plant Development & Opps Plan	1.15	2	Clarification has been added on excavated volumes and reuse of excavated material for fill. Noted that specifications for fill will be developed during final engineering design.

Information Request/Intervention	Document	Exhibit	Section	Revision
EMR Phase 4 IR Figure 3-1 This figure is specific to the process plant and excludes auxiliary facilities. Provide additional figure that is a blown out version as to include auxiliary buildings (reagent mixing areas, reagent storage, ROM stockpile, etc.) and their general arrangement in relation to the process plant.	Process Plant Development & Opps Plan	1.15	3.1	The figure has been expanded to include the ROM stockpile. Reagent mixing and storage was already shown on the figure. A second figure has been included to focus on the ROM pad and crusher.
EMR Phase 4 IR Section 3.2 - Ore Stockpiles This section needs to be further delineated. This should include metallurgical domains and ore classifications reconciled with Site Characterization Plan (including ARD/ML report), QA/QC for classification process, foundation prep, containment measures, segregation methods, etc. This was partially discussed at the phase 4 workshop and further details must be provided in the updated plan.	Process Plant Development & Opps Plan	1.15	3.2	Added further information on metallurgical domains and process for identifying placement of ore into different stockpiles.
EMR Phase 4 IR Section 3.4 - Water Management System This section indicates that make-up water will be preferentially drawn from a number of sources but it is unclear how the preference will be determined (e.g., water quality, quantities, proximity, etc.). Clarify prioritization of preferentially drawn make-up water for the Process Plant.	Process Plant Development & Opps Plan	1.15	3.4	Added detail on the criteria planned to be used for prioritizing sources of water for make-up water for the process plant.
EMR Phase 4 IR Section 3.4 - Water Management System The plan states that the water treatment plant will treat mine drainage water.	Process Plant Development & Opps Plan	1.15	3.4	Revised text to state water from dewatering of the open pit and underground mines (via the Pit Rim Pond) and added reference to the Water Management Plan which details the site water management strategy.

Information Request/Intervention	Document	Exhibit	Section	Revision
BMC to confirm if this statement applies to all contact water from the whole mine site and provide reference to where this information is located.				
EMR Phase 4 IR Section 4.5 - Tailings Disposal More clarity is needed on the dewatering of tailings: -what defines "high" on the filter feed tanks. -is there a cut-off of when a certain amount of off-spec tailings are produced that would trigger a mill maintenance/shut down period? Provide additional and more detailed information on the dewatering of tailings.	Process Plant Development & Opps Plan	1.15	4.5	Additional detail on what will be taken into consideration for a 'high' level in the filter feed tanks has been included in the Plan.
EMR Phase 4 IR Section 4.5 - Tailings Disposal Acknowledging that BMC mentioned the use of a QA/QC program for tailings at our Phase 4 workshop, it is unclear in this section what the QA/QC process is prior to transport and disposal of tailings. This should be outlined here. Outline QA/QC process for tailings transport and disposal.	Process Plant Development & Opps Plan	1.15	4.5	Details on the plant monitoring of tailings physical parameters have been added to the Plan.
EMR Phase 4 IR Section 4.5 - Tailings Disposal More information is required around paste fill for the underground operations. As discussed at the Phase 4 workshop, 200,000 m³ tailings are expected to be used as paste fill. What impact will this have on the operation and closure of the Class A facility, what if a larger percentage of tailings report underground?	Process Plant Development & Opps Plan	1.15	4.5	Added detail that approximately 200,000 m ³ of tailings are planned to be used for paste backfill, which represents less than 3% of the total volume of tailings planned to be placed in the Class A Waste Storage Facility and this will have no effect on the operation and closure of the Class A Storage Facility.

Information Request/Intervention	Document	Exhibit	Section	Revision
BMC to acknowledge the comment with revised wording in the next plan submission and ensure it is consistent with the Tailings and Waste Rock management plans.				
EMR Phase 4 IR Section 4.6 - Reagent Handling and Preparation The plan states Each reagent will be prepared within its own area to contain spillage. Additional information is needed and should be consistent with details required under the site preparation section. BMC to provide clarity on how each reagent and the general storage and mixing areas will be contained within their area. Including any primary, secondary and additional containment measures.	Process Plant Development & Opps Plan	1.15	4.5	Additional detail on primary and secondary containment measures has been included in the Plan.
EMR Phase 4 IR Section 6 - Concentrate Storage and Haulage The plan states Before leaving the concentrate storage shed, all trucks will pass through a seasonal wheel wash facility to ensure that any concentrate spillage is removed from the truck and trailers. Will there be a different type of wash facility dependent on the season, or will it only operate seasonally? If only available seasonally, provide reasoning. BMC to acknowledge the comment with revised wording in the next plan submission.	Process Plant Development & Opps Plan	1.15	6	The wheel wash has been removed from the plan. Trucks will be inspected for loose concentrate following loading. Any concentrate will be brushed from the truck prior to departure from the storage shed, consistent with practices at other northern operations.
EMR Phase 4 IR Concentrate Transportation Route to Stewart BC Figure The figure has Junction 37 annotated as Jakes Corner. BMC to revise annotation.	Process Plant Development & Opps Plan	1.15	6	Figure 6-1 has been revised.

Information Request/Intervention	Document	Exhibit	Section	Revision
EMR Phase 4 IR Section 7 - Power Plant The full life cycle of power supply requirements, sources, and power plant development should be outlined more clearly in this section. In the Phase 4 workshop BMC indicated that it would start with diesel generators during construction, then move to the power plant under diesel with the potential to switch to LNG. BMC to provide more clarity on the stages of power generation and power plant installation, and which types of fuels will be utilized during each phase. Include any plans for renewable energy source investigations or projects.	Process Plant Development & Opps Plan	1.15	7	Added further information on power across the site for construction and operations.

LIST OF ACRONYMS AND ABBREVIATIONS

BMC	BMC Minerals Ltd.
HDPE	High Density Polyethylene
HPM	High Precious Metals
IBC	Intermediate Bulk Containers
kV	kiloVolt
kW	kiloWatt
LGO	Low Grade Ore
MIBC	Methyl-isobutyl-carbinol
SDS	Safety Data Sheet
Mt/year	Million tonnes per year
MW	MegaWatt
oz	Troy Ounce
ROM	Run of Mine
RRDC	Ross River Dena Council
SAB	SAG and Ball Mill
SAG	Semi-autogenous Grinding
SMBS	Sodium Metabisulphite
t	Tonne
t/h	Tonnes per hour
w/v	Mass concentration; mass of solute in volume of solution
w/w	Mass fraction; mass of solute in mass of solution

GLOSSARY

N+1 Configuration: A system design to ensure power availability in the event of a generator failure, with 'N' representing the number of generators required for operations and the '+1' representing the number of backup generators.

P80: The 80th percentile of a particle size distribution curve. 80 percent of a sample is smaller than the P80 sizing.

Tailings: The material remaining after processing of ore to remove the valuable minerals in the ore.

Tote Road: The existing 24 km road alignment between the Robert Campbell Highway and the ABM Deposit.

Tote Road Upgrade: The widening and re-grading of the Tote Road between the Camp and the ABM Deposit.

Trommel Screen: A cylindrical drum screen installed at the discharge of a SAG or ball mill to separate and remove oversize product from the process stream.

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1 INTRODUCTION

BMC Minerals Ltd. (BMC) is the owner of the Kudz Ze Kayah Project (the Project). Since acquiring the Project in 2015, BMC has actively engaged in assessing historical work, optimizing design, resource drilling, economic assessment, baseline environmental studies, and First Nations and community engagement as well as the successful completion of the Executive Committee Screening by the Yukon Environmental and Social-Economic Assessment Board.

BMC has completed a feasibility study for the Project, which considers open pit and underground mining of the ABM Deposit, with ore then processed into separate copper, high precious metals (HPM) (containing silver, gold and lead), and zinc concentrates via sequential flotation. The Process Plant will operate at variable throughput rates depending on ore characteristics, up to 2.2 million tonnes per year (Mt/year) or 270 tonnes per hour (t/h).

1.1 PLAN REVIEW AND EXECUTION

BMC has had extensive engagement with Ross River Dena Council (RRDC) including community meetings in Ross River, Elders Oversight Committee Meetings, meetings with Chief and Council and engagement with RRDC's wholly owned environmental consultancy, Dena Cho Environmental and Remediation Inc. (Dena Cho). As part of this ongoing engagement, prior to this Plan being finalized Dean Cho conducted a detailed independent review of the draft plan. Issues raised during the Dena Cho review were addressed collaboratively through a number of workshops and where appropriate this plan was amended and additional commitments added.

BMC and Ross River Dena Council (in its role as lead community for the Kaska Nations, including Liard First Nation) are parties to an existing Socio-Economic Participation Agreement (SEPA) for the KZK Project. In 2019, BMC and RRDC (on behalf of all Kaska Nations) signed a Letter of Intent committing the parties to a modernization process for the existing SEPA. In March 2021, BMC tabled a proposed modernized SEPA with all Kaska leadership. The proposed SEPA includes provision for establishment of a Kaska/BMC Environmental Management Advisory Committee. Under the current proposal before Kaska, this committee will be tasked with, among other things, reviewing and providing input into environmental management plans, receiving and reviewing reports on implementation of those plans, reviewing monitoring plans/results, reviewing incident reports, and reporting back to Kaska members.

2 SITE PREPARATION

As detailed in the Wildlife Protection Plan (BMC, 2026a):

- Clearing will be kept to a minimum and only include areas required to safely construct and operate the Project;
- Clearing will be planned to minimize disturbance to bird nesting; and
- Nest surveys will be conducted as described below for any clearing during the nesting season (with involvement from Kaska First Nation representatives).

As much as practicable, land clearing will occur outside the nesting season. If land clearing is to be conducted during the nesting season (early May to late August), breeding bird surveys will be conducted prior to clearing and any identified active nests will be buffered. This is required to ensure compliance with the *Migratory Birds Convention Act 1994* (Government of Canada, 1994), which prohibits the disturbance or destruction of migratory bird nests and eggs in Canada.

Site preparation for the Process Plant will include site preparation for other infrastructure in the general vicinity of the Process Plant (including the water treatment plant, power plant, fuel storage and mine operations centre), as illustrated in Figure 2-1. Dewatering and geotechnical design constraints will be determined during the detailed Process Plant design phase.

Once the limits of the Process Plant and other infrastructure are set out, the natural ground surface will be cleared of vegetation (generally to 3 m beyond the defined limits). Clearing will be limited to those areas necessary for establishment of Project infrastructure.

Control measures will be implemented during clearing and throughout the construction program to limit the effects of surface erosion and contain and manage any impacts, as detailed in the Sediment and Erosion Control Management Plan (BMC, 2026b). Natural cover will be maintained outside of planned clearing areas to attenuate noise generated at the operating areas of the mine. This will include maintaining vegetation cover between the Process Plant and the camp.

Topsoil is defined as soil of any gradation or degree of plasticity that contains significant quantities of visually identifiable organics (e.g., vegetable matter, sod, roots, or humus) as determined by the Engineer. Topsoil will be stripped and stored in strategically placed reclamation stockpiles throughout the Project site for subsequent reuse in site reclamation. The thickness of topsoil to be removed will vary across the site and will be determined by the Engineer based on the character and thickness of material encountered. Cleared vegetation may be mixed with topsoil stockpiles for use in future reclamation works.

The planned Process Plant site is overlain by approximately three to six metres of overburden. Overburden overlying the final Process Plant and infrastructure footprint and areas planned for the placement of engineered fill, will be removed during site preparation for the Process Plant foundations. Overburden that does not overlie these areas will remain in place. Although permafrost is not common on the west slopes of the Geona Creek valley (Palmer, 2023), removal of the

overburden overlying the Process Plant foundations will ensure that any potential issues associated with permafrost are eliminated.

As overburden is removed, a geotechnical assessment will be made of the suitability of this material for construction purposes, as described in the Mine Development and Operations Plan (BMC, 2026c). Overburden that is assessed as being suitable for construction purposes will be hauled to the location intended for its use and placed in a temporary stockpile or hauled to the Overburden Stockpile. Facilities that will potentially use overburden from the Process Plant site for construction purposes include; the Pit Rim Pond, the Tote Road Upgrade (from Camp to the open pit), the Class A and Class B Waste Storage Facility basin liners and the Fault Creek Diversion works.

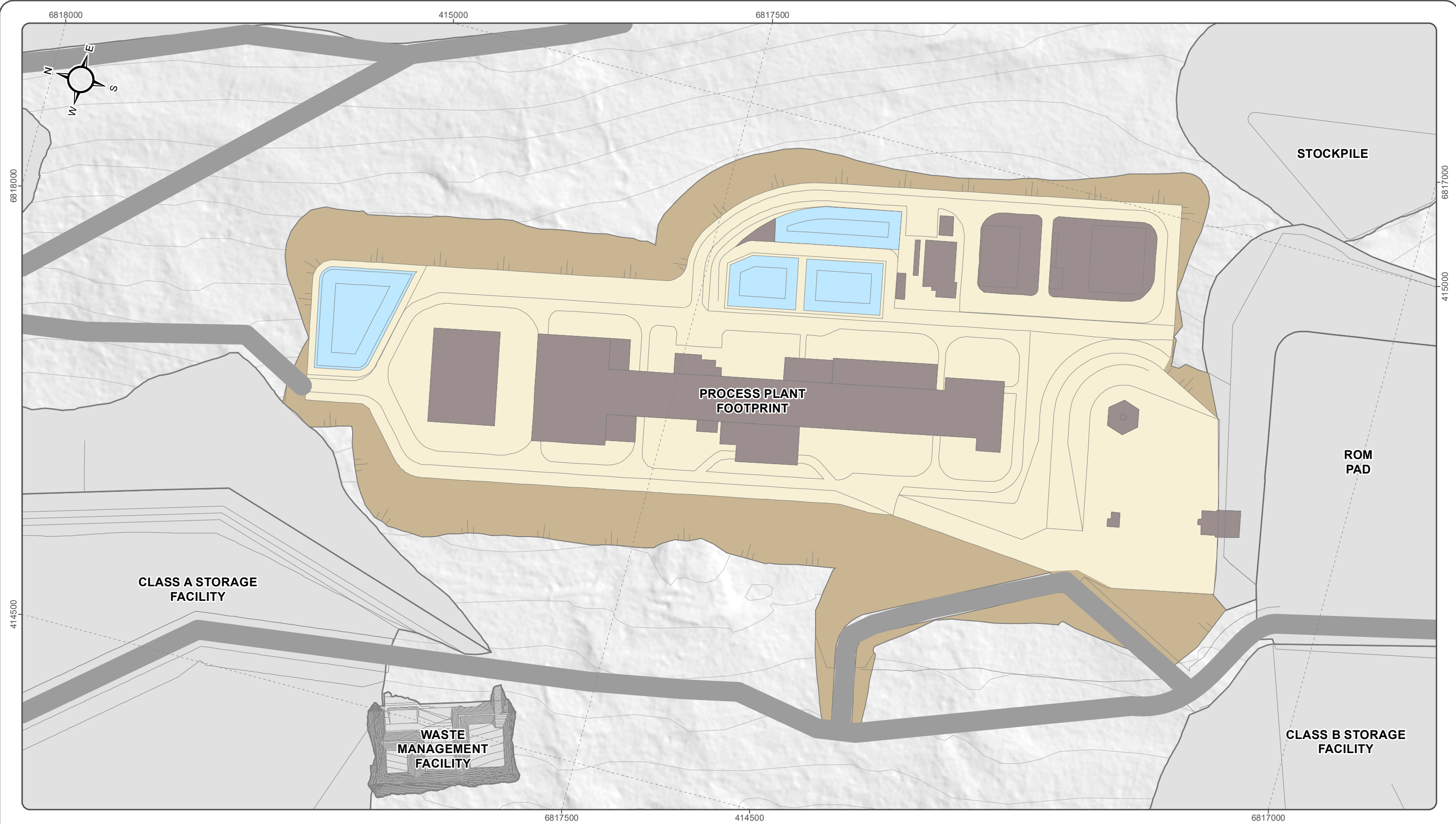
Care will be taken to segregate any frozen material removed during site development. These materials are unsuitable for immediate re-use but may be suitable for use in future reclamation works following thawing and draining of excess water. Frozen material will be transported to the Frozen Material Storage Area (within the footprint of the Overburden Stockpile) for management until thawed and drained. Management of frozen material and the Frozen Material Storage Area is described in greater detail in the Mine Development and Operations Plan (BMC, 2026c).

Overburden material deemed unsuitable for construction purposes will be removed and transported to the Overburden Stockpile for storage or to other temporary stockpiles for reuse as closure covers. As the overburden will be subsequently used as a closure cover for the Class A, Class B, and Class C Storage Facilities, other temporary Overburden Stockpiles may be created adjacent to the final footprint of these storage facilities.

Once the overburden has been removed, the exposed weathered rock will be ripped and used as fill to meet the designed cut and fill requirements for the Process Plant. Drilling and blasting of fresh rock will eventually be required once the overburden and weathered bedrock have been removed. Temporary explosives magazines will be established to accommodate packaged and initiating explosives, further details of which are included in the Hazardous Material Management Plan (BMC, 2026d). Blasted fresh rock will either be dozed to the final destination or loaded into trucks and hauled, depending on the distance involved.

Rock placed as fill for the Process Plant will be suitably compacted as required by the design to provide a competent surface for construction. Excavations for foundations will be completed according to approved designs.

The estimated surface clearing required for excavation and preparation of the Process Plant and other infrastructure is 21.5 hectares. Estimated volumes of materials that will be excavated to construct the surface for the Process Plant and associated infrastructure are summarized in Table 2-1. Cut and fill requirements are balanced, with excavated weathered and fresh rock used for construction of the fill portion of the designed foundation. Fill specifications will be developed during final engineering design of the facility to ensure that it provides the required geotechnical stability and support to the foundations of the infrastructure that will be constructed above it. As noted above, overburden will be used for construction of other facilities (where suitable for construction use) or alternatively placed in the Overburden Stockpile for future reuse.



Satellite imagery obtained from ESRI ArcGIS map service <https://services.arcgisonline.com/ArcGIS/rest/service> on May 31 2024.

Datum: NAD 83, Map Projection: UTM Zone 9N

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0 50 100 150 Metres

 Process Plant Ponds	 Other Mine Feature Footprint
 Process Plant and Ancillary Infrastructure	 Proposed Road
 Pad Extents	 Contour (5 m)
 Pad Excavation Limits	



KUDZ ZE KAYAH PROJECT

FIGURE 2-1

**PROCESS PLANT AND ANCILLARY INFRASTRUCTURE
EXCAVATION LIMITS**

MAY 2024

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Table 2-1: Estimated Volumes of Material for Process Plant Site Preparation

Material	Volume (m ³)
Topsoil	43,000
Overburden	540,000
Weathered Rock	169,000
Fresh Rock	257,000

3 PROCESS PLANT AND ANCILLARY INFRASTRUCTURE

This section describes the planned processing and ancillary infrastructure. Greater detail and unit process specific flowsheets are available in Chapters 4 to 7.

3.1 PROCESS PLANT FACILITIES

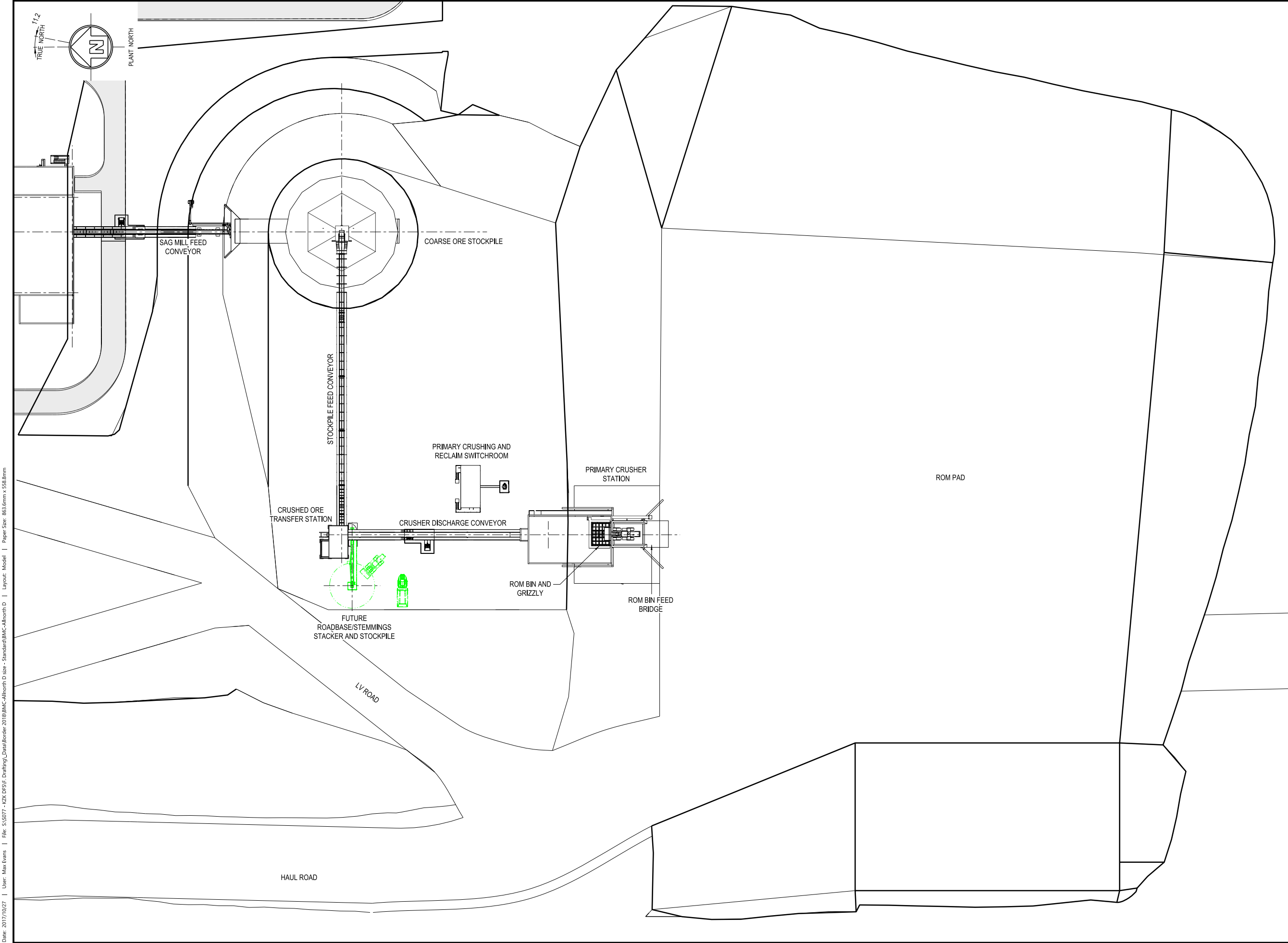
The Process Plant and associated service facilities will process run-of-mine (ROM) ore at an average rate of approximately 2.0 Mt/year, to produce separate copper, HPM and zinc concentrates and tailings. The Process Plant will be capable of processing at higher rates depending on ore comminution properties and Process Plant feed grades, up to 2.2 Mt/year. A general arrangement of the Process Plant and ancillary infrastructure is shown in Figure 3-1, with the ROM pad and crusher shown in Figure 3-2.

The planned Process Plant design consists of the following unit process operations:

- Primary crushing of ore;
- Stacking of ore onto a conical, covered stockpile;
- Grinding of the ore in a SAB circuit (SAG mill and ball mill) with classification by hydrocyclones;
- Pre-float, rougher and cleaner flotation of copper, including regrind of copper rougher concentrate;
- Sequential pre-float, rougher and cleaner flotation of lead, including regrind of lead rougher concentrate;
- Sequential pre-float, rougher and cleaner flotation of zinc, including regrind of zinc rougher concentrate;
- Thickening, pressure filtration, and stockpiling on site of copper, HPM, and zinc flotation concentrates. Copper and zinc concentrates will be loaded in bulk onto trucks for transport, while HPM concentrate will be loaded into sealable containers before transport by truck;
- Flotation tailings dewatered first by thickening and then by pressure filtration;
- Filtered flotation tailings transported for permanent storage at the Class A Storage Facility or fed to the paste plant for backfill production (during underground mine operations); and
- Concentrator water and air services and associated infrastructure.

Provision has been allowed for the inclusion of a gravity gold circuit, secondary crusher and heavy media separation circuit should future operational requirements support the inclusion of these.





REFERENCE DRAWINGS		
DRAWING NO	DRAWING DESCRIPTION/TITLE	REF
S077-000-DRG-GN-001	PROPOSED PRIMARY SETOUT - PLAN	1

NOTES:
1. X

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PROJECT:

**KUDZ ZE KAYAH
PROJECT
DEFINITIVE FEASIBILITY
STUDY**

TITLE:

**ROM PAD CRUSHER
INFRASTRUCTURE**

DWG NO:	FIGURE 3-2	REV:	B
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Prior to commencement of ore production from the underground mine, a new cemented paste backfill facility will be constructed adjacent to the tailings filter area for the purpose of receiving filtered tailings for mixing with cementitious binder to produce backfill for use in the underground operation.

A noise control standard will be established and maintained as part of site procurement requirements. All vehicles and internal combustion engines will be equipped with appropriate muffler systems to control noise emissions and exhaust air quality. A regular planned maintenance program (including lubrication) will be established for all installed equipment to maintain plant availability.

3.2 ORE STOCKPILES

Ore from ABM open pit and underground mining operations will be hauled to the ROM pad for stockpiling into different classes of ore for subsequent blending and placement into the Process Plant. The ROM pad will hold both ore for short term processing and low grade ore that may not be processed until later. The ore stockpiles are situated at the base of the Class B Storage Facility and the ROM Pad will incorporate the same foundation preparation methods as used for the Class B Storage Facility (described in the Waste Rock and Overburden Management Plan, BMC (2026e)). The surface of the ROM Pad will be graded to a sump for collection and management of surface runoff, which will be pumped to the Water Treatment Plant for treatment as required.

Metallurgical domains and ore grades will be used for classification of mined ore into the various ROM ore stockpiles. In certain circumstances discrete stockpiles may be created to manage a particular type of ore (for example, a pocket of ore containing an element that could be considered an impurity in the final metal concentrate and thereby attract a financial penalty).

Five separate metallurgical domains were identified during feasibility level assessment of the Project representing different mineralogical compositions. At the commencement of ore processing, it is expected that ore from each of these domains will be stockpiled separately to allow selective feed of ore into the processing plant and to allow reconciliation of plant performance to a particular mineralization style. As time progresses and the level of experience in processing the different metallurgical domains increases, it is anticipated that stockpile management will be simplified and different metallurgical domains will be stockpiled together.

Four of the metallurgical domains are sourced from the ABM Zone mineralization, while the fifth domain comprises Krakatoa Zone mineralization. The different metallurgical domains are:

- +1340RL – spatially controlled mineralogical zonation above 1340 m RL, with pyrite dominant over pyrrhotite and lacking a significant magnetite component, and with an elevated level of copper-silver bearing sulphosalt mineralization (primarily tennantite-tetrahedrite);
- MET2-4 – massive sulphide mineralization with pyrrhotite dominant over pyrite and a significant magnetite component;

- MET5-7 – massive sulphide mineralization with pyrite dominant over pyrrhotite and lacking significant magnetite component;
- MET8 – vein/stockwork mineralization with significant silicate gangue component; and
- Krakatoa - mineralization from the Krakatoa Zone, with pyrite dominant over pyrrhotite and lacking a significant magnetite component, and with an elevated level of silver-copper bearing sulphosalt mineralization (primarily freibergite).

The grade control ore model will be the foundation for assigning mined ore to the various ore stockpiles, supplemented by grab sample assays on an as required basis for confirmatory checks. The grade control ore model is a refinement of the life of mine geological model, specifically focussed on the ore planned to be mined over a six to twelve month period and informed by closer spaced infill grade control drilling. This drilling will serve to refine ore and waste boundaries, predicted mined grades and metallurgical domain categorization (or other stockpile classification as may be determined to be appropriate in the future).

The ROM stockpile area will be in use during operations and will be reclaimed when Closure is initiated.

As noted in Section 3.1, primary crushed ore will be discharged onto a conical, covered stockpile.

The design of the crushing circuit may include a diverter gate to allow material (ore or waste) to be bypassed to a reinforced concrete bunker, to produce temporary stockpiles of ore and/or waste and is described in Section 4.1.

A temporary tailings slurry storage area has been considered in the Process Plant design. A low permeability lined earthen Rejects Pond has been included so as to enable the tailings filtration plant to be bypassed in the event of a stoppage (e.g. filter ceases operation, filtered tailings haulage delays or tailings that deviate from the required specification for addition to the dry stack storage impoundment). During normal operations, the Rejects Pond will be kept empty so that it is available for its intended use as an emergency storage facility. Once tailings operations have returned to normal, tailings slurry in the Rejects Pond will be pumped back into the tailings circuit and the pond returned to empty.

Filtered tailings will also be temporarily stored in the tailings load out facility (refer to Section 4.5) prior to transport to and placement in the Class A Storage Facility.

Filtered concentrate will be temporarily stored in the concentrate storage and load out facility (refer to Section 4.4 and Chapter 6) prior to loading onto trucks for transport.

3.3 TAILINGS FACILITIES

Filtered tailings will be produced at the Process Plant for subsequent storage in the Class A Storage Facility. A portion of the filtered tailings will be combined with cementitious binder for production of paste backfill for use in the underground mine.

The Class A Storage Facility will store both filtered tailings and Class A waste rock. The design of the facility incorporates basin and cover layers, each comprising a layer of low permeability glacial till material, a geomembrane, and a final layer of sand and gravel placed above the geomembrane for protection from construction vehicle traffic and to collect and convey seepage within the facility. A buttress will be constructed on the downstream slope of the Class A Storage Facility using Class C material, thereby improving the overall geotechnical stability of the facility. A continuous drainage layer placed above the basin geomembrane liner will provide a pathway for seepage beneath the tailings material and will be graded to collect and convey seepage flows to internal sumps at the base of the facility, at the upstream toe of the buttress. Seepage will report to the Class A Storage Facility Collection Pond, from where it will be pumped to the Water Treatment Plant.

Tailings and rock will be placed, progressively covering previously deposited tailings and waste rock to limit the extent of exposure to oxygen and moisture.

Progressively and during Closure, the facility will be capped with a composite cover consisting of a geomembrane overlain by a protective layer and a layer of a minimum of three meters of Class C material for frost and erosion protection. A final layer of growth media will overlie the Class C material and the facility will be revegetated to restore pre-mining conditions on the hillside.

The Tailings Management Plan (BMC, 2026f) contains more detailed information on the construction and operation of the Class A Storage Facility.

3.4 WATER MANAGEMENT SYSTEM

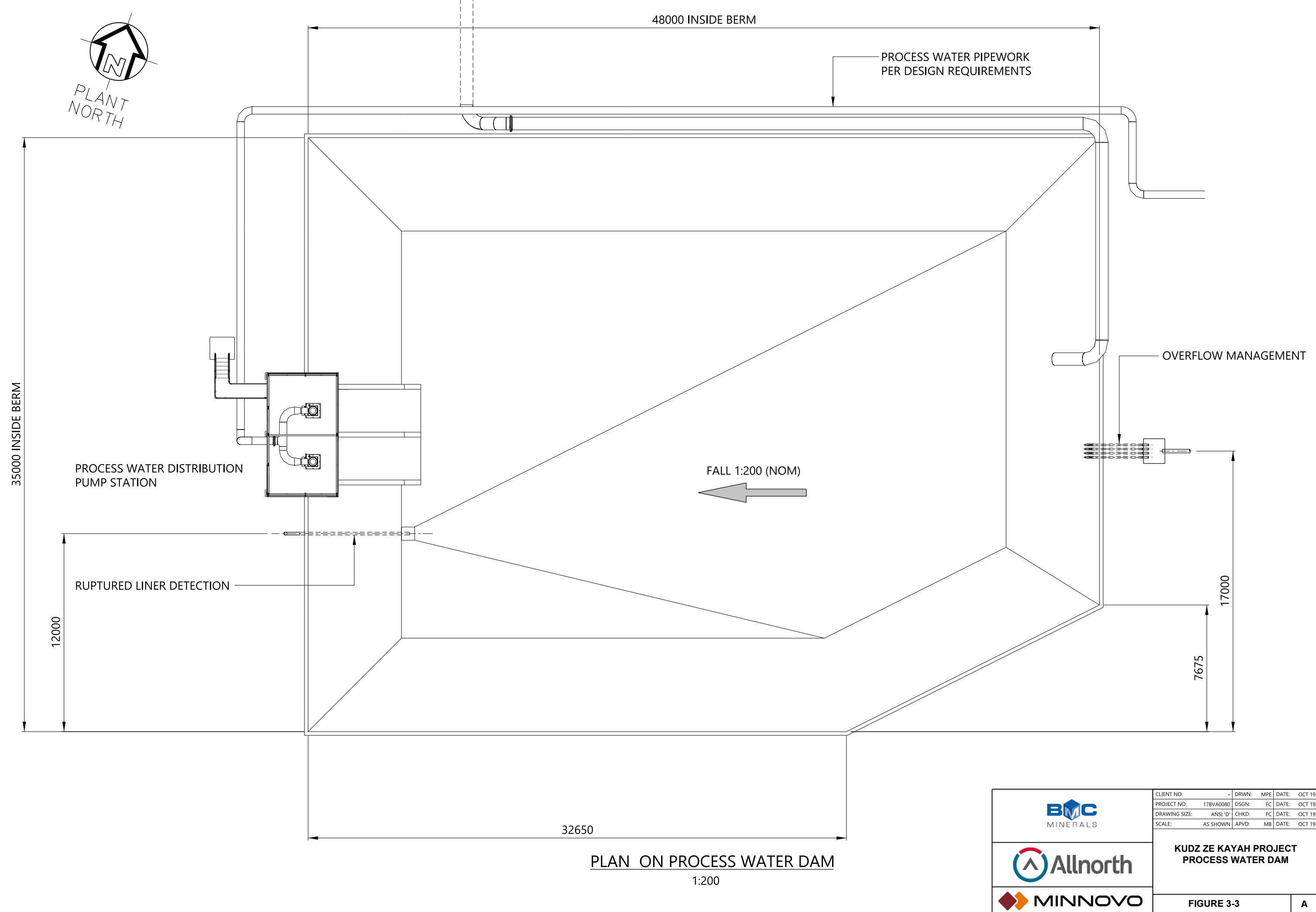
Process water for commencement of processing operations will most likely be drawn from water collected in the Pit Rim Pond or Lower Water Management Pond during the construction period, although fresh water from site wells will also be available if required. During operations, water will be recycled through the Process Plant, requiring minimal make up water input to supplement the process water inventory. New water that is required for make-up purposes will be preferentially drawn from the Water Treatment Plant, Class A, B, and C Storage Facility Collection Ponds, Lower Water Management Pond, pit dewatering bores, or the Pit Rim Pond, rather than drawing from fresh water supplies. As a general philosophy, water will be preferentially drawn from those sources with the poorest water quality, subject to the water quality not affecting Process Plant performance. The secondary consideration for prioritizing water sources for make-up water for the Process Plant will be the quantity of water that is available in each source. The Water Management Plan (BMC, 2026g) contains more detailed information on the planned use and management of water for the Project.

The following Process Plant design considerations have resulted in minimizing the requirement for fresh water top-up:

- Both flotation concentrates and tailings are first thickened, then dewatered by pressure filtration thus minimizing water loss (contained in solids) from the Process Plant;
- Closed process water circuit – water recovered by thickening and filtration is returned to the lined earth Process Water Dam (Figure 3-3) for recycling through the Process Plant;
- Process water is filtered for use as gland seal water, instead of using fresh (raw) water; and
- Continuous cycling of a percentage of the process water through the Water Treatment Plant to maintain water quality in the Process Plant circuit.

The process water balance shows that Process Plant operations will be a net consumer of water, after allowing for losses of water from the circuit in the production of metal concentrates and tailings. It is not expected that water from the Process Plant will need to be discharged during normal operations. However, should the need arise to discharge water from the Process Plant it will be passed through the Water Treatment Plant prior to discharge into the Lower Water Management Pond.

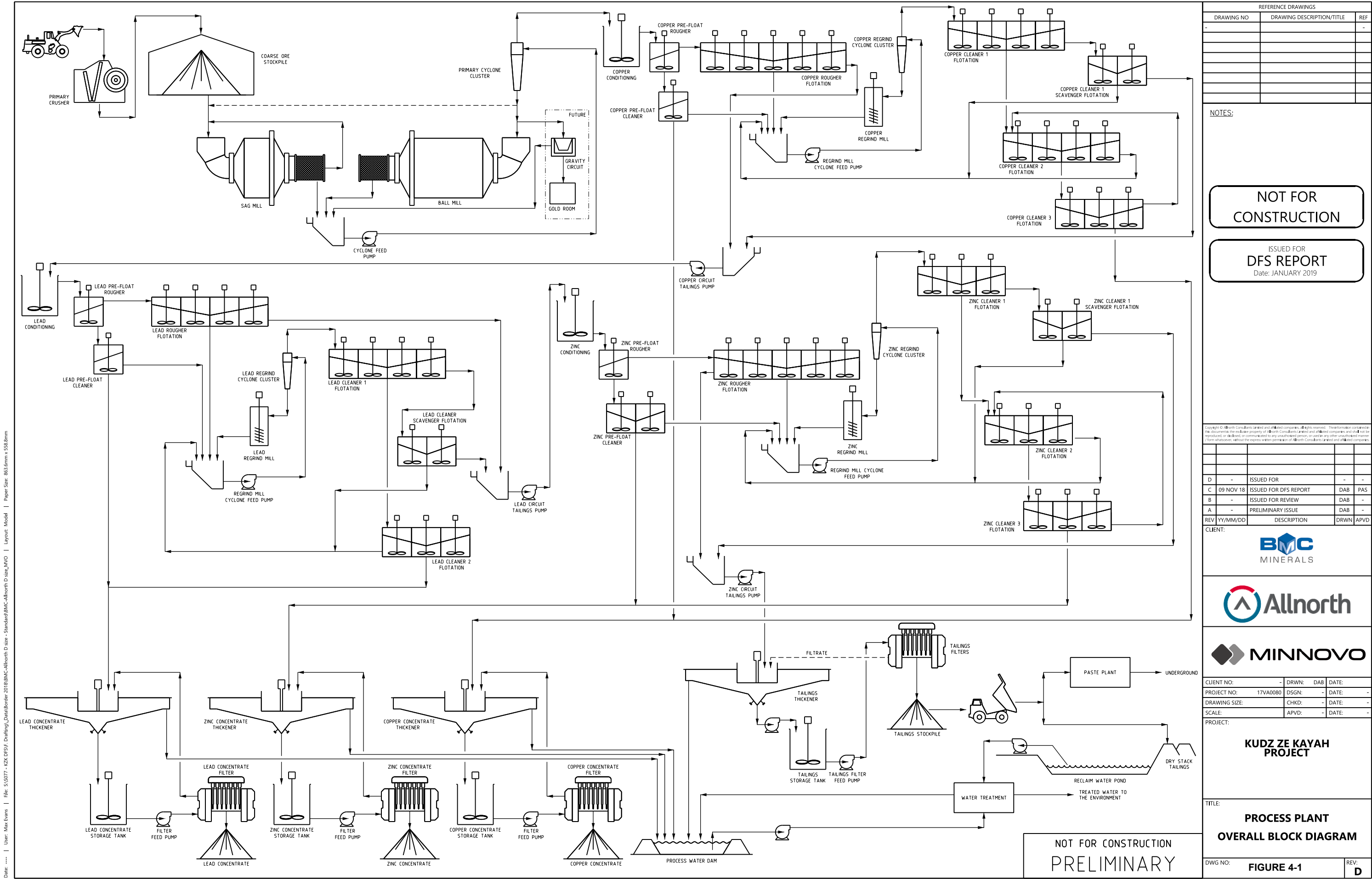
A Water Treatment Plant will be constructed adjacent to the Process Plant and will treat influent water streams from the Class A Storage Facility, a portion of the Process Plant water, ROM pad runoff, water from the Process Plant pad sumps, and water from dewatering of the open pit and underground mines (via the Pit Rim Pond), as detailed in the Water Management Plan (BMC, 2026g). Water quality from each of these sources will be monitored to determine whether treatment through the Water Treatment Plant is required. Treated water will be discharged into the Water Management Ponds. The planned treatment system consists of a metals removal circuit and a Selen-IX™ circuit for selenium removal. The Water Treatment Plant metals removal circuit will be modified to include a High-Density Sludge lime neutralization system to treat Class A contact water before it is predicted to turn acidic. The Water Management Plan (BMC, 2026g) contains detailed information on the design and operation of the Water Treatment Plant.



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	PROJECT NO:	178VA0080	DSGN:	FC	DATE:	OCT 19
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	SCALE:	AS SHOWN	APVD:	MB	DATE:	OCT 19
	KUDZ ZE KAYAH PROJECT PROCESS WATER DAM					
	FIGURE 3-3					A

4 PROCESS METHODS

The following section describes the current equipment design and planned operating methods for the Process Plant but are subject to change based on final engineering design and optimized practices. They should be read in conjunction with the simplified process block diagram shown in Figure 4-1.



REFERENCE DRAWINGS		
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PROJECT:

KUDZ ZE KAYAH PROJECT

TITLE:

PROCESS PLANT
OVERALL BLOCK DIAGRAM

DWG NO: **FIGURE 4-1** REV: **D**

4.1 CRUSHING FACILITIES AND SEQUENCE

The crushing circuit process flow diagram is shown in Figure 4-2.

ROM ore will be reclaimed from the ore stockpiles by a front end loader and fed into a 135 tonne (t) ROM bin. A grizzly will be placed over the mouth of the ROM bin to limit feed size to 900 mm x 900 mm. Ore will be withdrawn from the bin by a feeder and fed to a vibrating grizzly for removal of fines. Vibrating grizzly oversize will feed the primary crusher, which will be a single toggle jaw crusher operating in open circuit. The primary crusher will have a 1.4 m x 1.1 m feed opening, capable of handling an ore top size of 900 mm. The primary crusher will operate with a closed side setting of 125 mm and the crushed product is planned to have a P_{80} of 130 mm.

Vibrating grizzly undersize and primary crusher product will discharge onto the primary crusher discharge conveyor and then onto the coarse ore stockpile feed conveyor at the crushed ore transfer station. Tramp steel will be removed from the crushed ore by a self-cleaning magnet at the primary crusher discharge conveyor head (discharge) chute. The design layout includes a diverter gate at the crushed ore transfer station after the tramp magnet, to allow material (ore or waste) to be bypassed to a reinforced concrete bunker.

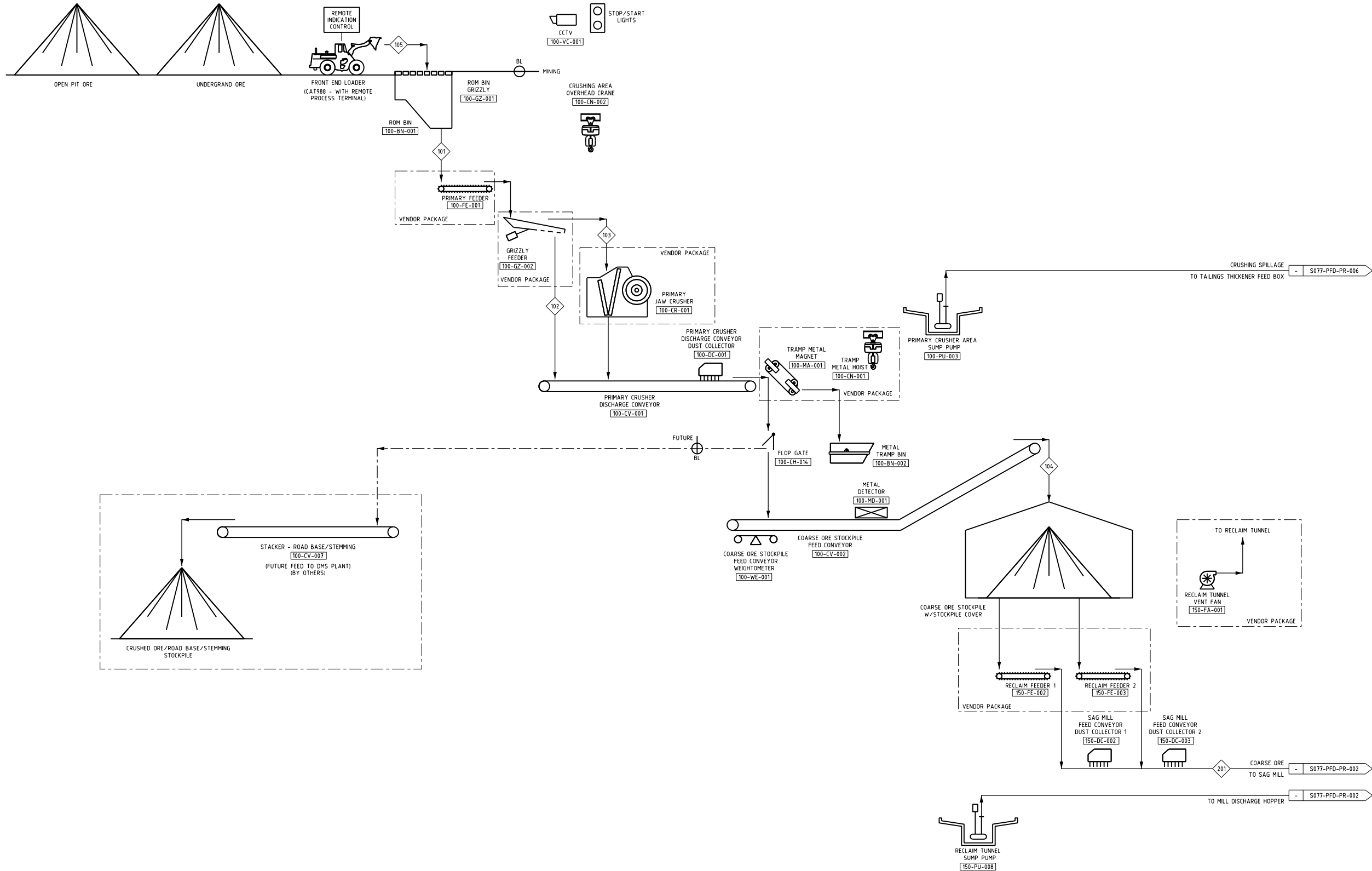
The diverter gate will be used to create a temporary ore stockpile if an extended period of maintenance of the crushing facility is planned, so that crushed ore can continue to be fed uninterrupted into the grinding mills. In this situation crushed ore will be reclaimed by front end loader from the concrete bunker and stockpiled adjacent to the crushed ore transfer station. Non acid generating (Class C) waste rock will also be periodically crushed and diverted to ground at the crushed ore transfer station for production of road base and blast hole stemming for the mining operation. Crushed waste rock will similarly be stockpiled near the crushed ore transfer station until required for use by Mine operations.

Provision has been made in the design for discharge from the diverter gate to feed a (future) stacker conveyor for stockpiling crushed ore or waste if conditions warrant following commencement of operations.

The coarse ore stockpile will provide a live storage with two reclaim apron feeders located in the reclaim tunnel. Each apron feeder will provide the nominal SAG mill feed rate of up to 270 t/h. The stockpile will be conical in shape and will be covered to minimize dust generation and to prevent ingress of precipitation.

The crushing circuit will be operated on a dry basis. Dust generated in the crushing circuit will be captured by dust extraction systems (with filters) at the primary crusher discharge and at the reclaim feeders' discharge. The crusher infrastructure and conveyor transfer chutes will be located in enclosed structures to minimize the potential air entrainment of dust and for fugitive dust emissions. Conveyors will also be covered to minimize the potential for fugitive dust emissions during ore conveying. The enclosures will also serve to reduce noise impacts on the local environment.

Water may be applied as required to ROM ore stockpiles during summer months so as to minimize generation of dust from the ROM stockpile. Installation of water sprays at conveyor transfer points will be considered on an as required basis (unless not practicable or safe to do so due to sub-zero temperatures).



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DRAWING SIZE:	-	CHKD:	-	DATE:	-
SCALE:	-	APVD:	-	DATE:	-

PROJECT:

KUDZ ZE KAYAH PROJECT

TITLE:

**PROCESS PLANT
CRUSHING
PROCESS FLOW DIAGRAM**

DWG NO:	FIGURE 4-2	REV:	E
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4.2 GRINDING CIRCUIT

The Grinding area has been designed with an overall run time of 93% and is scheduled to operate 24 hours per day. The grinding circuit process flow diagram is shown in Figure 4-3. All grinding equipment will be located within the main processing plant building that will reduce noise impacts on the local environment.

The grinding circuit will comprise a single open circuit SAG mill and single ball mill in closed circuit with cyclones to produce a final product of P_{80} 70 μm .

The SAG mill will be a 5.79 m diameter x 5.49 m effective grinding length, grate discharge, steel-lined mill, driven by a 2.7 MW single pinion drive. The mill will be driven by a variable speed drive.



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DWG NO:	FIGURE 4-3	REV:	F
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The SAG mill will discharge over a 12 mm aperture trommel screen. Trommel oversize (pebbles and steel scats) will be returned to the mill feed conveyor via three return conveyors. A tramp metal magnet will remove steel scats from the transfer point between the first and second return conveyors to minimize undersize steel fragments in the SAG mill.

The ball mill will be a 4.72 m diameter x 7.32 m effective grinding length, overflow discharge, rubber-lined mill driven by a 2.7 MW single pinion drive. The mill will be driven by a fixed speed drive.

The ball mill will discharge over a 10 mm aperture trommel screen, with the oversize discharging into a bunker for regular collection and disposal by a front end loader or skid-steer loader in the Class A Storage Facility.

The SAG mill and ball mill trommel screen undersize will gravitate into the mill discharge hopper, where the combined mill discharge will be diluted with process water and pumped to a hydrocyclone cluster for classification. The cluster will consist of five 500 mm diameter cyclones, with three operating and two spare. The overflow from the cluster will flow by gravity to the flotation feed trash screen, to remove any trash prior to flotation. The trash will be collected in a bin and disposed at the site Waste Management Facility in accordance with the Waste Management Plan (BMC, 2026h). Lime will be added to the flotation feed hopper (trash screen underflow) to increase the pH ahead of copper flotation. The cyclone underflow will gravitate to a splitter box. Provision has been made in the design for future installation of a gravity circuit if assessed as beneficial during operations. If the gravity circuit is installed, part of the underflow will report to the gravity circuit, prior to reporting to the ball mill with the balance of the cyclone underflow stream for further grinding.

A portion of the cyclone underflow can be directed to the SAG mill to facilitate power balancing between the SAG and ball mills, as the SAG mill will generally have spare capacity on most ore types.

A common liner handler will be used for removal and installation of the SAG and ball mill liners during planned mill relines.

An overhead gantry crane will be used for maintenance of the mills and cyclones. Monorails will be provided where access is denied to the gantry crane.

Expected mill circuit grinding media size are provided in Table 4-1.

Table 4-1: Grinding Media Data

Parameter	Units	SAG Mill	Ball Mill
Media type	n/a	Forged Steel	Forged Steel
Media diameter	mm	100 to 125	50

4.3 FLOTATION CIRCUIT

The Flotation area will operate under the same schedule as the Grinding area.

The flotation circuit will be a sequential circuit, with copper, lead and zinc recovered from the circuit in that order. All flotation cells will be agitated, forced air conventional cells.

4.3.1 Copper Flotation Circuit

Copper will be recovered first from the flotation circuit following the process flow sheet shown in Figure 4-4. Trash screen underflow slurry will be pumped to the first of two agitated copper conditioning tanks, where flotation reagents will be added. Conditioned slurry will flow by gravity to the first of six rougher flotation cells in series.

The first rougher cell will operate as a pre-float rougher. Pre-float rougher concentrate will be pumped to a single pre-float cleaner cell, where the concentrate will be upgraded and pumped to the copper final concentrate hopper. Pre-float cleaner tailings will flow by gravity to the copper regrind feed hopper.

Rougher concentrate from the other five rougher cells will be pumped to the copper regrind feed hopper. Rougher tailings will flow by gravity to the copper flotation tailings hopper.

The following streams will combine in the copper regrind feed hopper:

- Pre-float cleaner tailings;
- Rougher concentrate;
- Cleaner-scavenger concentrate;
- Second cleaner tailings; and
- Regrind mill discharge.

The combined slurry will be pumped to the copper regrind cyclone cluster for classification. The cluster will have three 380 mm diameter cyclones (one duty, two spare). Cyclone overflow (the regrind circuit product) will gravitate to the copper first cleaner, while cyclone underflow will gravitate to the copper regrind mill feed.

Copper cleaner flotation will include three cleaner stages, with a cleaner-scavenger operating after the first cleaner.

The copper first cleaner will consist of four cells in series. First cleaner concentrate will be pumped to the copper second cleaner feed. First cleaner tailings will flow by gravity to two copper cleaner-scavenger cells in series. The cleaner-scavenger concentrate will be pumped to the copper regrind feed hopper. Cleaner-scavenger tailings will flow by gravity to the copper flotation tailings hopper.

The copper second cleaner will consist of four cells in series. Second cleaner concentrate will be pumped to the copper third cleaner feed. Second cleaner tailings will be pumped to the copper regrind feed hopper.

The copper third cleaner will consist of three cells in series. Third cleaner concentrate will be pumped to the copper final concentrate hopper, where it will be combined with the copper pre-float cleaner concentrate. Third cleaner tailings will flow by gravity to the copper second cleaner feed.

The reagents used in the copper flotation circuit are:

- Lime;
- Sodium metabisulphite (SMBS);
- Copper circuit collector (Danafloat™ 262 or equivalent); and
- Frother (methyl-isobutyl-carbinol (MIBC) or higher flash point equivalent).

Reagents will be dosed as required into the copper conditioning tanks, copper pre-float rougher concentrate hopper, copper regrind feed hopper and copper first cleaner concentrate hopper. The final design will include process flexibility by including at least two alternate dosing points in the copper circuit. Reagents will be managed as per the Hazardous Materials Management Plan (BMC, 2026d).

Samples will be automatically collected from the copper rougher tailings, copper regrind cyclone overflow, copper cleaner scavenger tailings and final copper concentrate streams for process control and metallurgical accounting purposes.

4.3.2 Lead Flotation Circuit

Lead will be recovered from the flotation circuit second, following copper, as shown on the process flow sheet for lead in Figure 4-5. Combined copper flotation tailings will be pumped to the first of two agitated lead conditioning tanks, where flotation reagents will be added. Conditioned slurry will flow by gravity to the first of five rougher flotation cells in series.

The first rougher cell will operate as a pre-float rougher. Pre-float rougher concentrate will be pumped to a single pre-float cleaner, where the concentrate will be upgraded and will flow by gravity to the HPM final concentrate hopper. Pre-float cleaner tailings will be pumped to the HPM rougher concentrate hopper.

Rougher concentrate from the other four rougher cells will be pumped to the lead regrind feed hopper. Rougher tailings will flow by gravity to the lead flotation tailings hopper.

The following streams will combine in the lead regrind feed hopper:

- Rougher concentrate, including pre-float cleaner tailings;
- Cleaner-scavenger concentrate;
- Second cleaner tailings; and
- Regrind mill discharge.

The combined slurry will be pumped to the lead regrind cyclone cluster for classification. The cluster will have three 380 mm diameter cyclones (one duty, two spare). Cyclone overflow (the regrind circuit product) will gravitate to the lead first cleaner feed, while cyclone underflow will gravitate to the lead regrind mill feed.

Lead cleaner flotation will include two cleaner stages with a cleaner-scavenger operating after the first cleaner.

The lead first cleaner will consist of four cells in series. Lead first cleaner concentrate will be pumped to the lead second cleaner feed. Lead first cleaner tailings will flow by gravity to two lead cleaner-scavenger cells in series. Lead cleaner-scavenger concentrate will be pumped to the lead regrind feed hopper. Lead cleaner-scavenger tailings will flow by gravity to the lead flotation tailings hopper, where it will combine with the lead rougher tailings and will be pumped to the zinc flotation circuit.

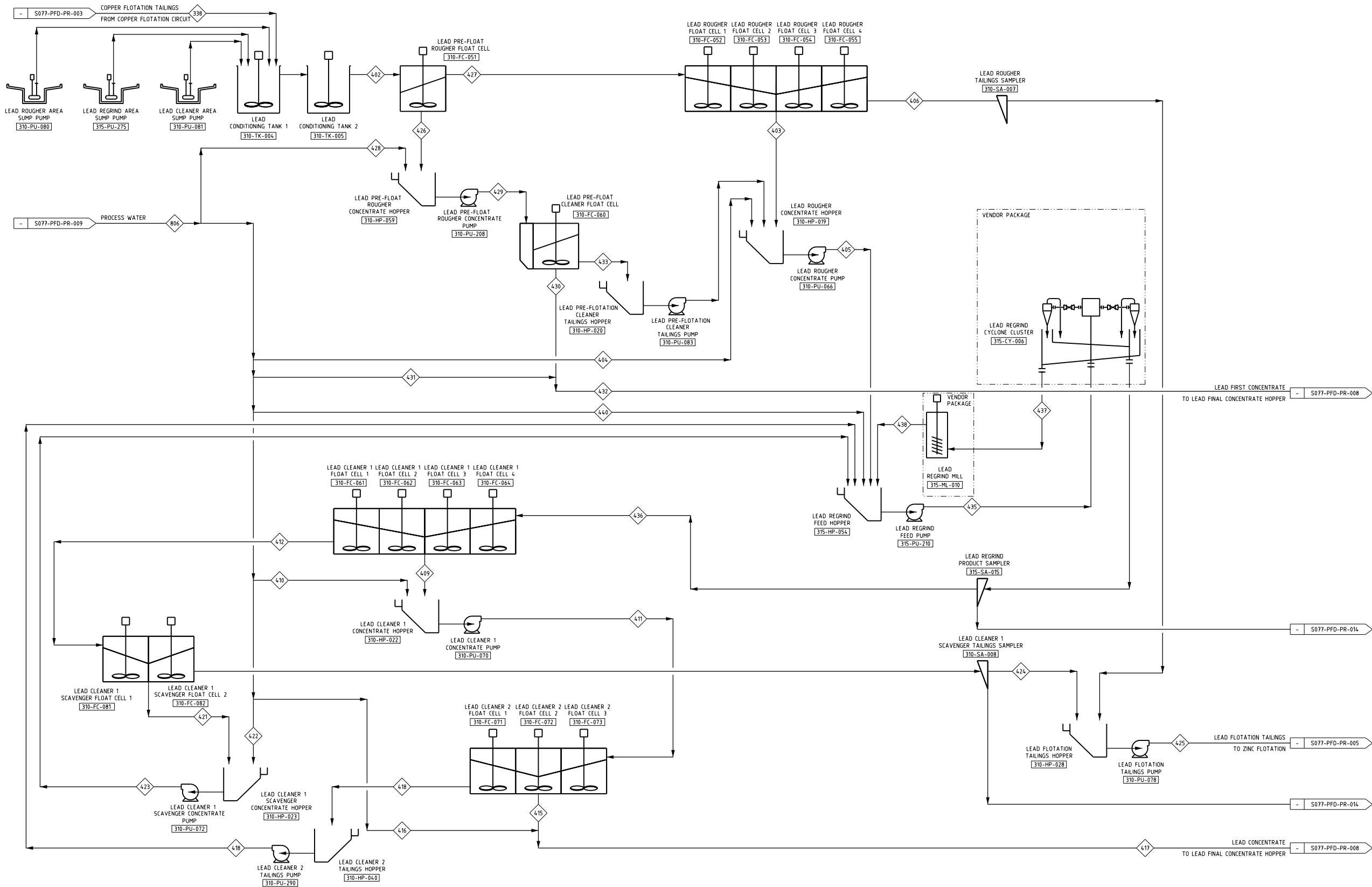
The lead second cleaner will consist of three cells in series. Second cleaner concentrate will flow by gravity to the HPM final concentrate hopper where it is combined with the HPM pre-float cleaner concentrate. Second cleaner tailings will be pumped to the lead regrind feed hopper.

Reagents used in the lead flotation circuit are:

- Lime;
- Sodium cyanide;
- Zinc sulphate;
- Lead circuit collector (Aerophine® 3418A or equivalent); and
- Frother (MIBC or higher flash point equivalent).

Reagents will be dosed as required into the lead conditioning tanks, lead pre-float rougher concentrate hopper, lead regrind feed hopper and HPM first cleaner concentrate hopper. Reagents will be managed as per the Hazardous Materials Management Plan (BMC, 2026d). The final design will include process flexibility by including at least two alternate dosing points in the lead circuit.

Samples will be automatically collected from the lead rougher tailings, lead regrind cyclone overflow, lead cleaner scavenger tailings and final HPM concentrate streams for process control and metallurgical accounting purposes.



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PROJECT:
KUDZ ZE KAYAH PROJECT

TITLE:
**LEAD FLOTATION AND REGRIND
PROCESS FLOW DIAGRAM**

DWG NO:	FIGURE 4-5	REV:	E
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4.3.3 Zinc Flotation Circuit

Zinc will be recovered third in the flotation circuit, following, copper and lead, and the process flow sheet for zinc flotation is shown in Figure 4-6. Combined lead flotation tailings will be pumped to the first of two agitated zinc rougher conditioning tanks, where flotation reagents are added. Conditioned slurry will flow by gravity to the first of six zinc rougher flotation cells in series.

The first rougher cell will operate as a pre-float rougher. Pre-float rougher concentrate will be pumped to two pre-float cleaners in series, where the concentrate will be upgraded and pumped to the zinc final concentrate hopper. Pre-float cleaner tailings will flow by gravity to the zinc regrind feed hopper.

Rougher concentrate from the other five rougher cells will be pumped to the zinc regrind feed hopper. Rougher tailings will flow by gravity to the zinc flotation tailings hopper.

The following streams will combine in the zinc regrind feed hopper:

- Pre-float cleaner tailings;
- Rougher concentrate;
- Cleaner-scavenger concentrate;
- Second cleaner tailings; and
- Regrind mill discharge.

The combined slurry will be pumped to the zinc regrind cyclone cluster for classification. The cluster has six 380 mm diameter cyclones (four operating, two spare). Cyclone overflow (the regrind circuit product) will gravitate to the zinc first cleaner feed, while the underflow will gravitate to the zinc regrind mill feed.

Zinc cleaner flotation will include three cleaner stages, with a cleaner-scavenger operating after the first cleaner.

The zinc first cleaner will consist of three cells in series. Zinc first cleaner concentrate will be pumped to the zinc second cleaner feed. Zinc first cleaner tailings will flow by gravity to two cleaner-scavenger cells in series. Zinc cleaner-scavenger concentrate will be pumped to the zinc regrind feed hopper. Zinc cleaner-scavenger tailings will flow by gravity to the zinc flotation tailings hopper.

The zinc second cleaner will consist of three cells in series. Zinc second cleaner concentrate will be pumped to the zinc third cleaner feed. Zinc second cleaner tailings will be pumped to the zinc regrind feed hopper.

The zinc third cleaner will consist of three cells in series. Zinc third cleaner concentrate will flow by gravity to the zinc final concentrate hopper. Zinc third cleaner tailings will flow by gravity to the zinc second cleaner feed.

Reagents used in the zinc flotation circuit are:

- Lime;
- Copper sulphate;
- Zinc circuit collector (Danafloat™ 468 or equivalent); and
- Frother (MIBC or higher flash point equivalent).

Reagents will be dosed as required into the zinc conditioning tanks, zinc pre-float rougher concentrate hopper, zinc regrind feed hopper and zinc first cleaner concentrate hopper. Reagents will be managed as per the Hazardous Materials Management Plan (BMC, 2026d). The final design will include process flexibility by including at least two alternate dosing points in the zinc circuit.

Samples will be automatically collected from the zinc rougher tailings, zinc regrind cyclone overflow, zinc cleaner scavenger tailings, combined final zinc tailings and final zinc concentrate streams for process control and metallurgical accounting purposes.

4.4 CONCENTRATE HANDLING

The Concentrate Handling area will operate under the same schedule as the Grinding area. The proposed process flowsheet for concentrate handling is shown in Figure 4-7.

Copper, HPM, and zinc final concentrates will be thickened in high rate thickeners. For copper and HPM concentrates a 9 m diameter thickener has been selected, while for zinc concentrate a larger thickener of 14 m diameter is anticipated to be required. The overflow from each thickener will flow by gravity to a common thickener overflow tank, where the streams will be combined and pumped to the Process water dam for reuse in the Process Plant.

Flocculant will be dosed to the feed boxes and launders of each concentrate thickener. The preferred flocculant is Magnafloc® 155; however, equivalent, or similar types may be used.

Thickened concentrates at nominally 65% solids w/w are stored in agitated filter feed tanks. The copper and HPM concentrate filter feed tanks are each 220 m³ live volume, while the two zinc filter feed tanks are each 300 m³ live volume.

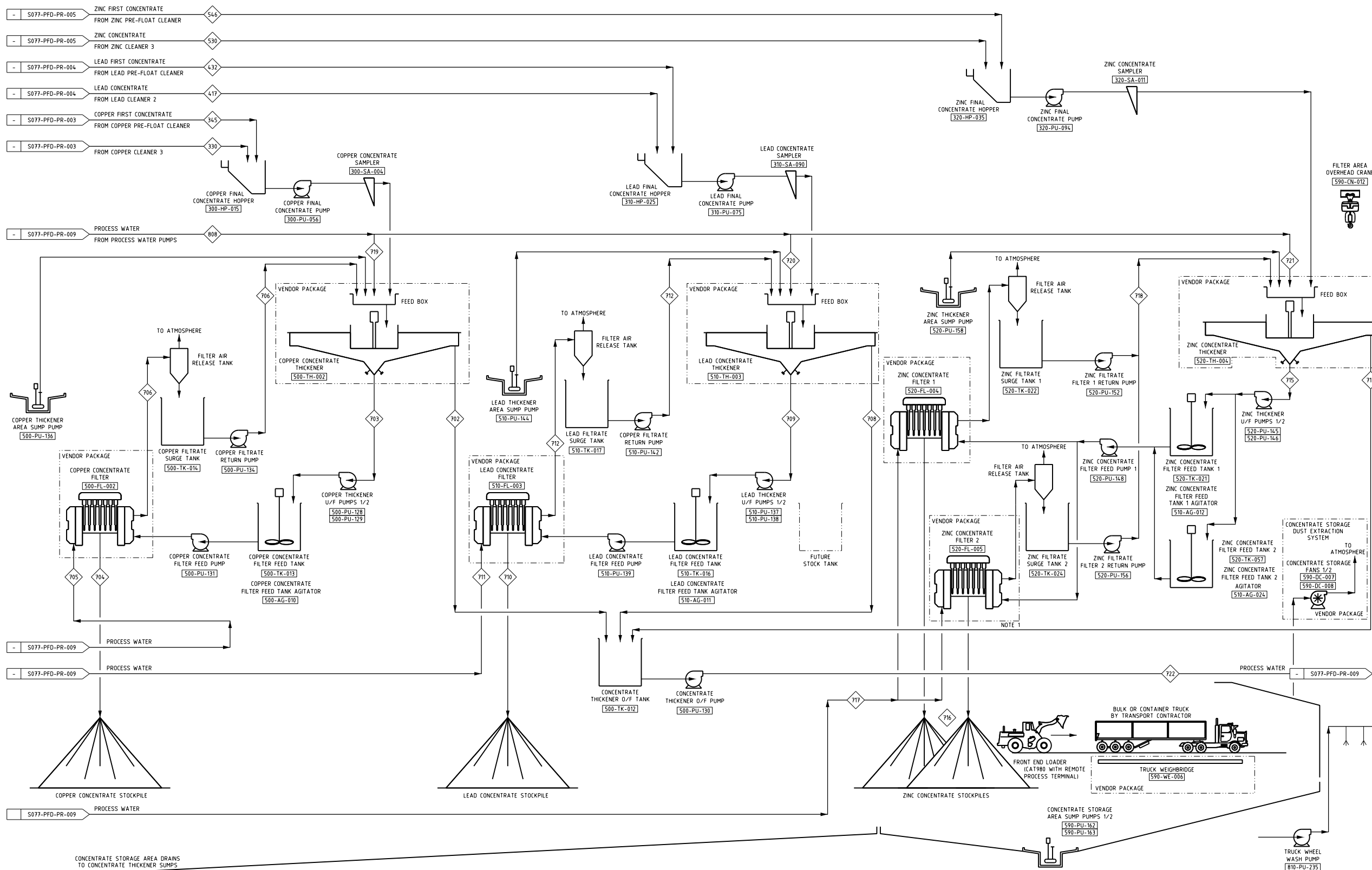
Thickened concentrates will be dewatered using vertical plate pressure filters to achieve a nominal 9% moisture content. Filters have been specified with membrane squeeze and air blow capability to ensure the target moisture is achieved. A common size (85 m²) filter will be used for all three duties, with single filters required for copper and HPM and two filters required for the zinc duty. Filtered concentrates will be dumped into catch bunkers directly below each filter.

Copper and zinc concentrates will be removed by front end loader and placed in the concentrate storage bunkers (Chapter 6). Copper and zinc concentrates will be recovered by front end loader from the storage bunkers and bulk loaded into trucks for transport to port. HPM concentrate will be removed by front end loader and loaded directly into sealed containers for transport to port. Additional handling and management measures for the concentrates are presented in the Hazardous Materials Management Plan (BMC, 2026d).

A summary of the concentrate dewatering equipment is provided in Table 4-2.

Table 4-2: Concentrate Dewatering Summary

Parameter	Units	Copper	HPM	Zinc
Thickener diameter	m	9	9	14
Underflow solids concentration	% w/w	65	65	65
Number of filter feed tanks	#	1	1	2
Feed tank live volume (each)	m ³	220	220	300
Number of filters	#	1	1	2
Filtration area (each)	m ²	85	85	85



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**CONCENTRATE HANDLING
PROCESS FLOW DIAGRAM**

DWG NO: **FIGURE 4-7** REV: **F**

4.5 TAILINGS DISPOSAL

The Tailings Disposal area will operate under the same schedule as the Grinding area. The process flowsheet for tailings disposal is shown in Figure 4-8.

Zinc flotation tailings slurry will be collected in the tailings hopper and pumped to a 20 m diameter high rate tailings thickener for dewatering. Flocculant will be dosed to the feed box and launder of the tailings thickener. The preferred flocculant is Magnafloc® 155, however equivalent or similar types may be used.

Tailings thickener overflow will flow by gravity to the process water dam for re-use. Thickener underflow, dewatered to nominally 60% solids w/w, will be pumped to a splitter box which will evenly distribute slurry between two agitated filter feed tanks. Each filter feed tank will store slurry which will be pumped to two vertical plate pressure filters operating in parallel. The filters will dewater tailings to produce a filter cake with a nominal moisture content of 13%.

Tailings production will be monitored for moisture content and particle size distribution to monitor plant performance and allow adjustments as required as tailings characteristics vary over time. Moisture content is expected to be monitored through sampling of filter cake with a mechanical spear for analysis in a moisture analyser within the Tailings Loadout Building. It is expected that one sample will be taken every 30 minutes, with adjustment to sampling frequency as required as experience in the tailings management system increases. One composite sample will be collected each shift for analysis in the site laboratory for confirmatory test purposes. Particle size distribution will be monitored through the daily collection of samples from the thickener underflow at discharge to the tailings filtration storage tank, that are analysed in the site laboratory.

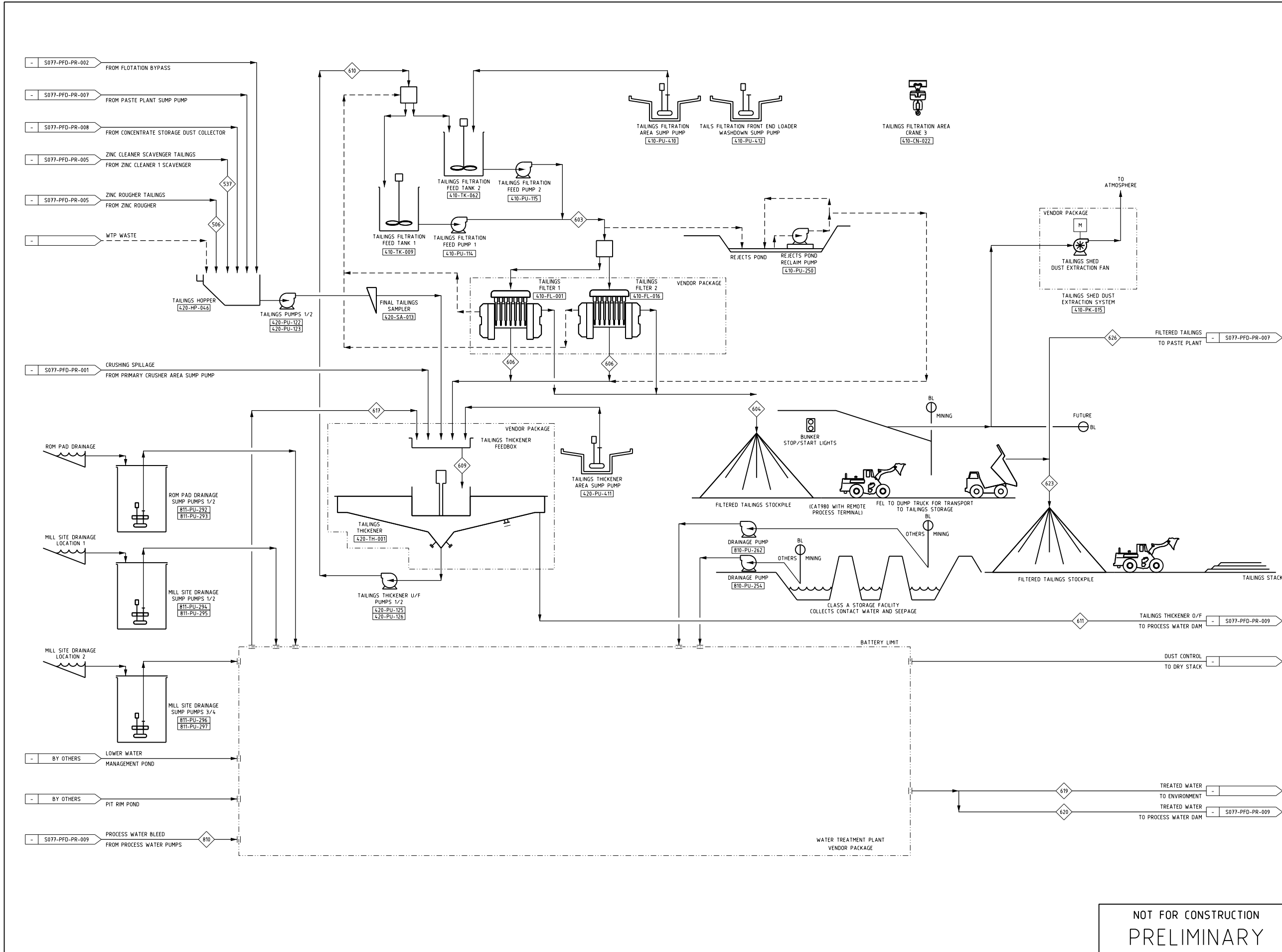
In the event that an issue occurs in the tailings dewatering system and the level of the filter feed tanks is high, excess tailings slurry can be temporarily diverted to the Tailings Reject Pond, which has 12 hours capacity, allowing operations to continue in the short term while issues are resolved. A typical tailings filter feed tank high level will be 80% full. Selection and confirmation of this value will be completed during detailed design, giving consideration to:

- Ensuring sufficient volume remains in the tank to accept thickener underflow slurry when normal plant operation is resumed;
- On re-start of normal plant operation, ensuring there is sufficient time for the control room operator to re-start tailings filtration;
- To avoid spillage from the tailings filter feed tank during re-start of normal operations; and
- To avoid additional tailings slurry reporting to the Tailings Reject Pond during re-start of normal operations.

Filtrate will flow by gravity to the tailings thickener feed box. Filtered tailings will be dumped into bunkers directly below each filter and reclaimed by front end loader. Tailings will be transported to the Class A Waste Storage Facility and stacked for disposal.

Once the underground mine commences production, filtered tailings will also be used to produce paste fill. Tailings filter cake will be delivered into a dump hopper, which will feed the tailings to a pug type paste mixer (Figure 4-9). The tailings filter cake will be combined with cementitious binder and water before being transferred to the underground mine.

Current expectations are that approximately 200,000 m³ of filtered tailings will be used for production of paste backfill over the life of the underground mine for localized ground support. This represents less than 3% of the total volume of tailings that are planned to be placed in the Class A Storage Facility and will have no impact on the operation and closure of the facility.



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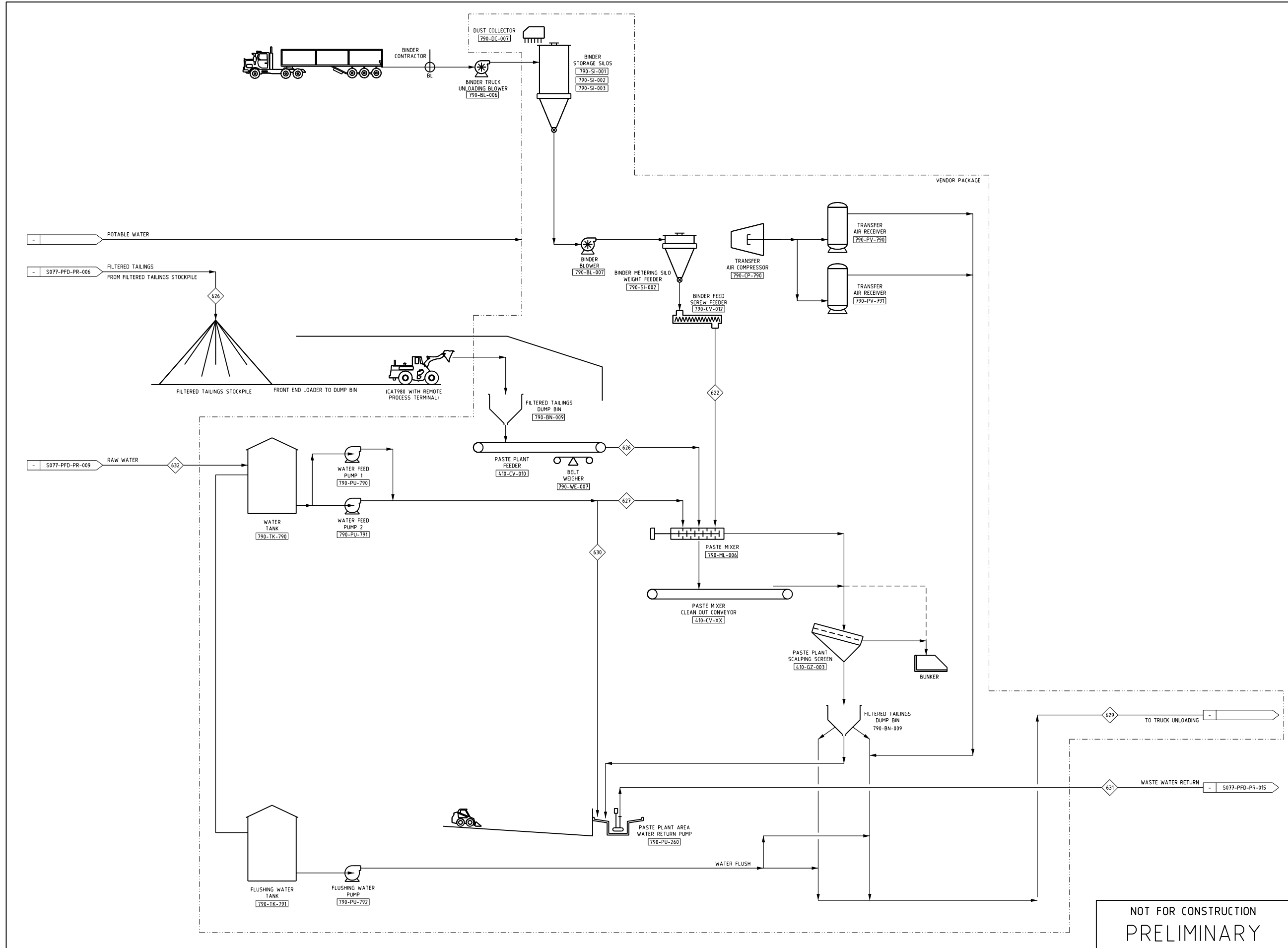
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TAILINGS HANDLING AND WATER TREATMENT PROCESS FLOW DIAGRAM

DWG NO	FIGURE 4-8	REV:	F
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PASTE PLANT PROCESS FLOW DIAGRAM		
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4.6 REAGENT HANDLING AND PREPARATION

The planned Process Plant reagents are summarized in Table 4-3.

Table 4-3: Process Plant Reagent Summary

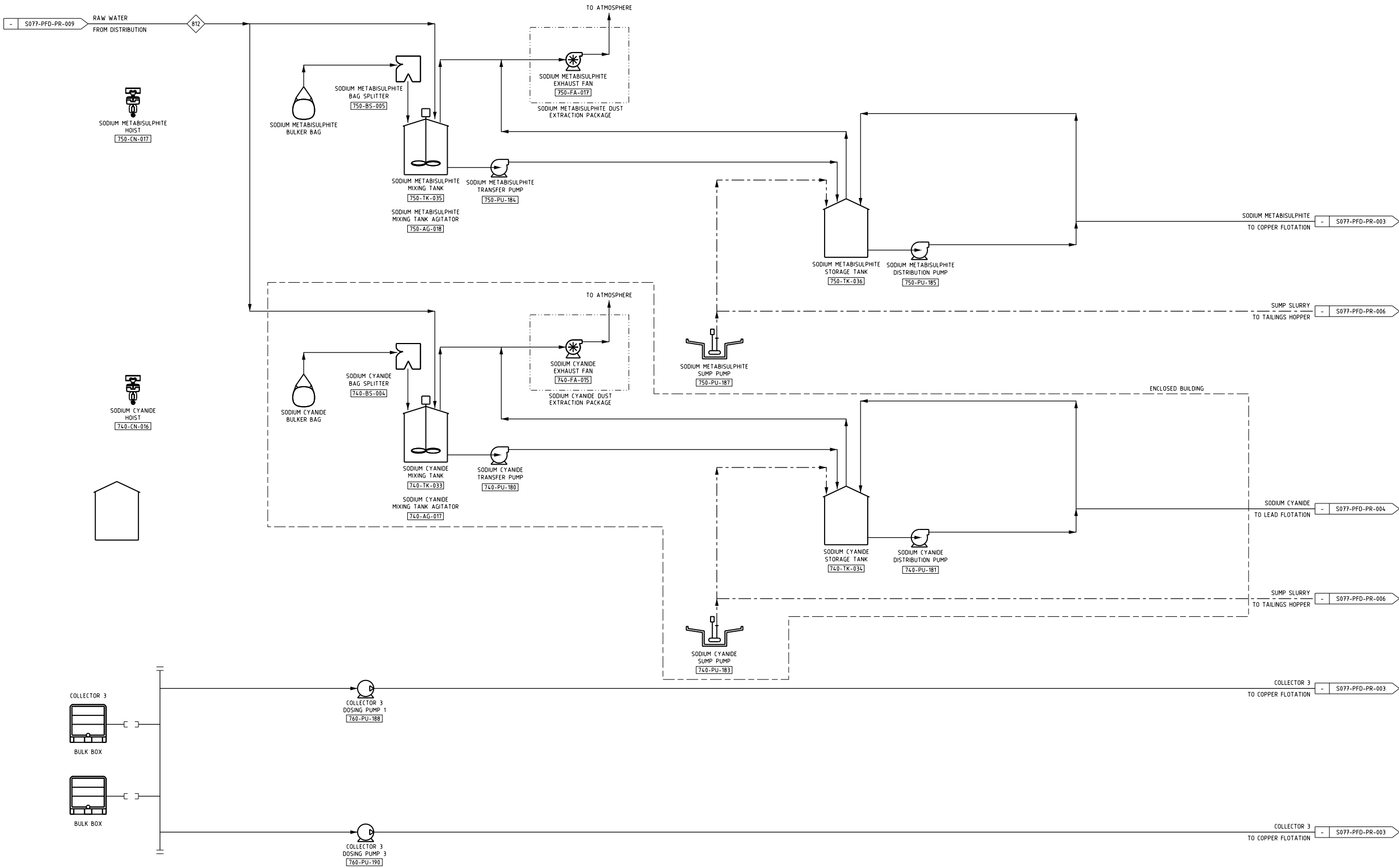
Plant Area	Duty or Purpose	Reagent Type
Grinding	pH modifier	Milk of lime
Copper Flotation	Collector	Danafloat™ 262 or equivalent
Copper Flotation	Depressant	Sodium Metabisulphite
Lead Flotation	Collector	Aerophine® 3418A or equivalent
Lead Flotation	Depressant 1	Sodium cyanide
Lead Flotation	Depressant 2	Zinc sulphate
Zinc Flotation	Activator	Copper sulphate
Zinc Flotation	Collector	Danafloat™ 468 or equivalent
All Flotation	Frother	Methyl Isobutyl Carbinol or higher flash point equivalent
Dewatering	Flocculant	Magnafloc® 155 or equivalent
Paste Backfill	Binder	TerraFlow™ or equivalent

The reagent mixing and distribution facilities for the Process Plant are summarized in the following sections and in Figure 4-10 to Figure 4-13. All reagent handling will be in accordance with the requirements of the Safety Data Sheets (SDS). These aspects will be confirmed and finalized during detailed design. The SDS for the planned reagents are provided in the Hazardous Material Management Plan (BMC, 2026d). The majority of the reagent mixing and storage facilities are located in the Process Plant building. Exceptions to this are noted in the following sections.

Each reagent will be prepared within its own area to contain spillage. Primary containment of reagent spillage will be fulfilled by reinforced concrete construction (floor, containment bund walls and spillage sump). The floor will be sloped towards the spillage sump in each area. Containment bunding will be sized to safely contain 110% of the stored capacity of the largest vessel within each reagent area. Secondary containment has not been allowed in feasibility design but will be considered in detailed design. It will typically consist of an HDPE liner installed underneath the concrete slab with an earth barrier and geotextile (or similar) as an interface, and will include leak detection incorporating a pipe manifold to which a pump can be connected. A dedicated spillage pump will return spillage from the sump to the mixing tank of that reagent for re-use in the Process Plant. Spill training will be provided for all personnel handling the reagents.

All reagent mixing and storage tanks located indoors will be provided with a roof and vented naturally or through forced extraction systems outdoors. Forced extraction systems have been provided where bag breaking activities are undertaken, or the reagent SDS require it as mandatory.

Additional information on the transport, storage, handling and use of the hazardous reagents used in the Process Plant is included in the Hazardous Material Management Plan (BMC, 2026d).



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PROCESS PLANT REAGENT PROCESS FLOW DIAGRAM SHEET 1 OF 4		
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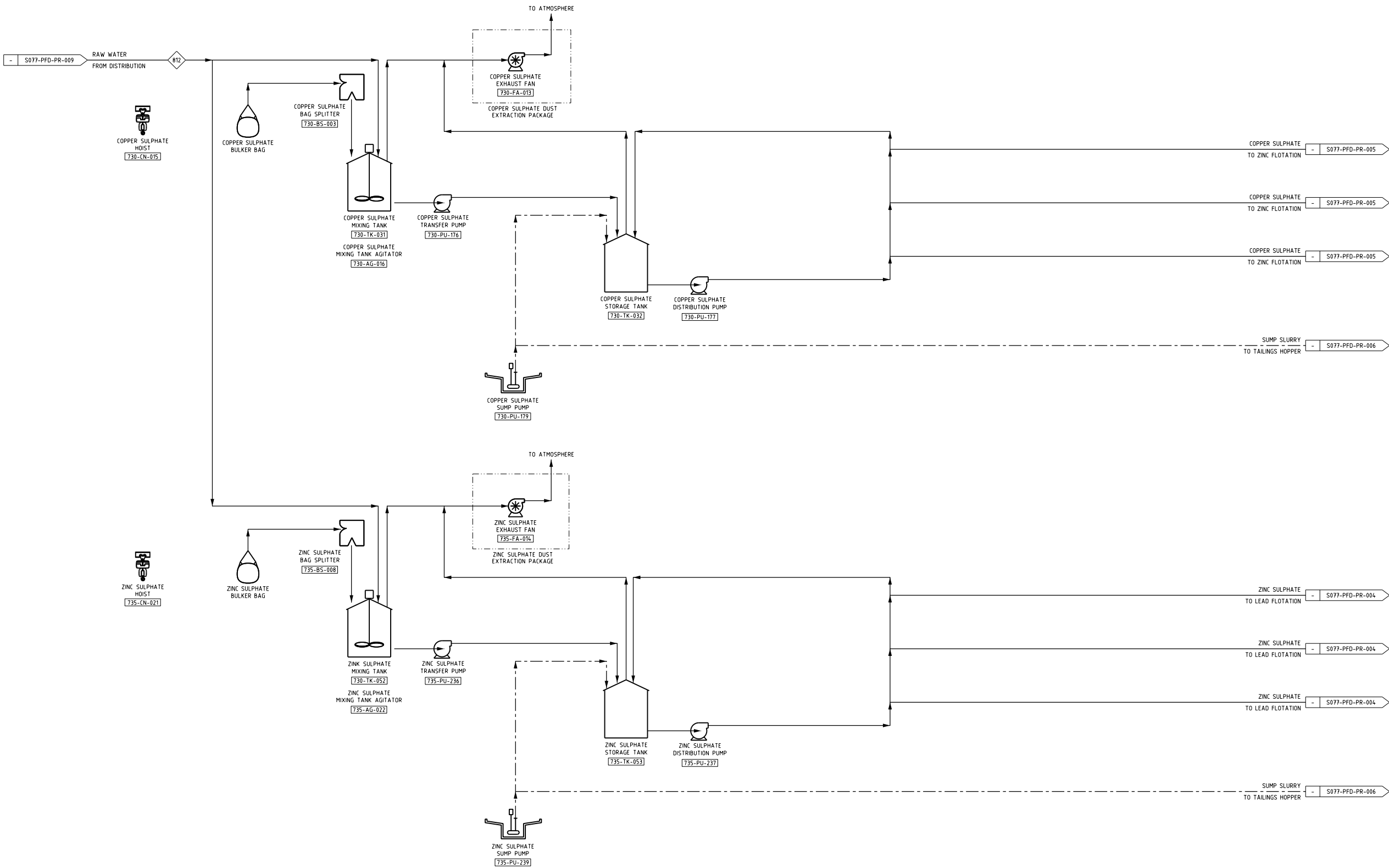
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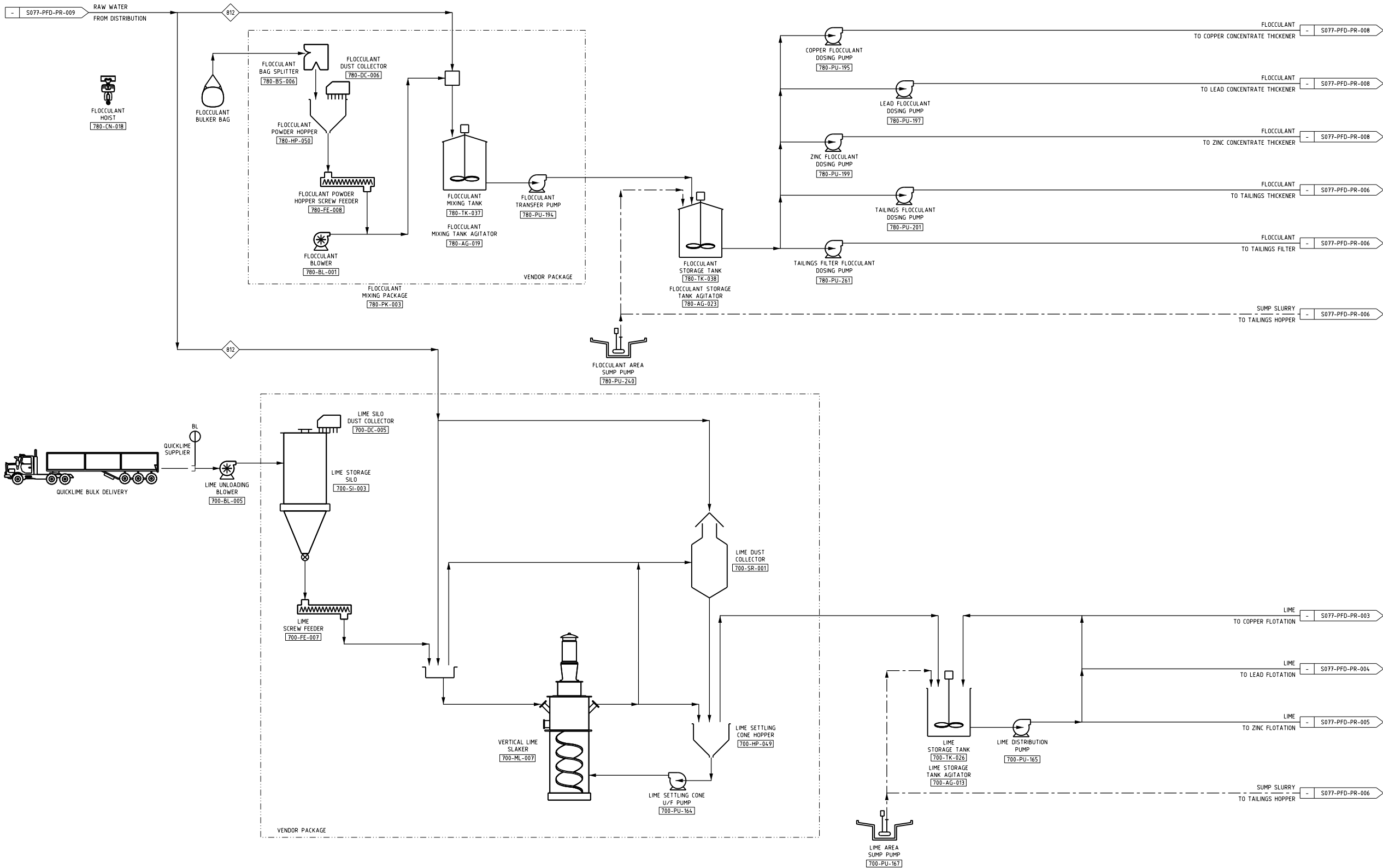
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PROCESS FLOW DIAGRAM
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FIGURE 4-11	F



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PROCESS PLANT REAGENT PROCESS FLOW DIAGRAM SHEET 3 OF 4		
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PROCESS PLANT REAGENT
PROCESS FLOW DIAGRAM
SHEET 4 OF 4

DWG NO:	FIGURE 4-13	REV:	E
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4.6.1 pH Modifier

pH modifier (quicklime) will be delivered in dry form bulk deliveries and stored in a silo external to the Process Plant building. The lime will be mixed using raw water in an automated lime slaking system to a mixed strength of 20% w/w and stored in a 40 m³ tank. Milk of lime slurry will be dosed to the grinding and flotation circuits from a ring main using actuated on-off valves. Mixing of the lime and storage of milk of lime slurry is completed in a separate building structure annexed to the main process building.

4.6.2 Copper Circuit Depressant

SMBS will be delivered in pellet form in 1,000 kg bulk bags and stored in the reagent store adjacent to the reagent mixing and distribution facility.

The SMBS will be mixed using raw water to a strength of 15% w/v in an agitated 15 m³ tank and transferred to a 25 m³ storage tank with a nominal 24 hours storage capacity. SMBS will be dosed to the copper flotation circuit via a ring main and automated control valves.

4.6.3 Copper Circuit Collector

Copper circuit collector (Danafloat™ 262 or equivalent) will be delivered to site in 1,000 L Intermediate Bulk Containers (IBC) and stored in the reagent store, adjacent to the reagent mixing and distribution facility.

The collector will be dosed 'as is' to the copper flotation circuit by variable speed dosing pumps. Nominally two bulk boxes will be connected and in use on the collector dosing skid at any time.

4.6.4 Lead Circuit Depressant 1

Sodium cyanide will be delivered to site in pellet form and stored in the reagent store, adjacent to the reagent mixing and distribution facility.

Sodium cyanide will be mixed using raw water to a strength of 10% w/v in a 10 m³ agitated tank and transferred to a 15 m³ storage tank with a nominal 50 hours storage capacity. Sodium cyanide solution will be dosed to the lead flotation circuit via a ring main and automated control valves.

Sodium cyanide mixing and storage of sodium cyanide solution is completed in a separate building structure annexed to the main process building to isolate personnel from this reagent. More detailed information specific to the management of sodium cyanide is available in the Cyanide Management Plan which is Appendix D of the Hazardous Materials Management Plan (BMC, 2026d).

4.6.5 Lead Circuit Depressant 2

Zinc sulphate will be delivered to site in pellet form in 1,200 kg bulk bags and stored in the reagent store, adjacent to the reagent mixing and distribution facility.

Zinc sulphate will be mixed using raw water to a strength of 20% w/v in an agitated 15 m³ tank and transferred to a 25 m³ storage tank. Zinc sulphate solution will be dosed to the lead flotation circuit via a ring main and automated control valves.

4.6.6 Lead Circuit Collector

Lead circuit collector (3418A or equivalent) will be delivered to site in liquid form in 1,000 L IBCs and stored in the reagent store, adjacent to the reagent mixing and distribution facility.

The collector will be dosed 'as is' to the lead flotation circuit by variable speed dosing pumps. Nominally two bulk boxes will be connected and in use on the collector dosing skid at any time.

4.6.7 Zinc Circuit Activator

Copper sulphate will be delivered to site in pellet form in 1,200 kg bulk bags and stored in the reagent store, adjacent to the reagent mixing and distribution facility.

Copper sulphate will be mixed using raw water to a strength of 20% w/v in an agitated 30 m³ tank and transferred to a 45 m³ storage tank. Copper sulphate will be dosed to the zinc flotation circuit via a ring main and automated control valves.

4.6.8 Zinc Circuit Collector

Zinc circuit collector (Danafloat™ 468 or equivalent) will be delivered to site in liquid form in 1,000 L IBCs and stored in the reagent store, adjacent to the reagent mixing and distribution facility.

The collector will be dosed 'as is' to the zinc flotation circuit using variable speed dosing pumps. Nominally two bulk boxes will be connected and in use on the collector dosing skid at any time.

4.6.9 Frother

Frother (MIBC or a higher flash point equivalent) will be delivered to site in liquid form in 1,000 L IBCs and stored in the reagent store, adjacent to the reagent mixing and distribution facility.

Frother will be dosed 'as is' to the copper, lead and zinc flotation circuits using variable speed dosing pumps. Nominally two bulk boxes will be connected and in use on the collector dosing skid at any time.

4.6.10 Flocculant

Flocculant will be delivered in dry powder form in 750 kg bulk bags and stored in the reagent store, adjacent to the reagent mixing and distribution facility.

Flocculant will be mixed using raw water in an automated 'wetted head' system to a mixed strength of 0.25% w/v. Mixed flocculant solution will be transferred to a 45 m³ storage tank. Mixed flocculant

solution will be dosed to the copper, HPM and zinc concentrate thickeners, the tailings thickener and tailings filters by variable speed, positive displacement pumps: one pump for each thickener.

4.6.11 Binder

Binder will be required for the paste plant, which will be constructed later during operations, as noted in Section 4.5. Binder will be delivered in dry form via mobile binder storage vessels (pigs), providing a maximum of 120 tonne in total storage. These will deliver to a 65 m³ 'day' silo for day to day requirements.

5 CONCENTRATE PRODUCTION

Concentrate production will vary over time as the grade of ore varies over the Mine life. The estimated average daily concentrate production over the life of the Mine is detailed in Table 5-1.

Table 5-1: Estimated Average Daily Concentrate Production

Parameter	Units	Copper Concentrate	HPM Concentrate	Zinc Concentrate
Concentrate Produced	dry metric tonne / day	137.3	129.1	518.9
Concentrate Grades				
Base Metal Grade	wt%Cu, wt%Pb, wt%Zn	25.0	51.8	51.9
Gold Grade	g/t Au	14.1	16.2	1.1
Silver Grade	g/t Ag	1,984	2,190	157
Process Recoveries				
Base Metal Recovery	% of Cu, % of Pb, % of Zn	73.8%	73.5%	85.9%
Gold Recovery	% Au	27.3%	29.4%	8.1%
Silver Recovery	% Ag	36.8%	38.2%	11.0%
Metal Recovered				
Base Metal	t Cu, t Pb, t Zn	34.3	66.9	269.2
Gold	oz Au	62	67	19
Silver	oz Ag	8,762	9,088	2,627

6 CONCENTRATE STORAGE AND HAULAGE

Filtered concentrates will be dumped into catch bunkers directly below each filter (Section 4.4). Copper and zinc concentrates will be removed by front end loader and stored in bunkers in the concentrate storage shed. Concentrate storage capacity of the bunkers is approximately 5,000 t for copper concentrate and 10,000 t for zinc concentrate. An additional storage bunker of approximately 1,000 t is available to segregate concentrate if required for blending requirements.

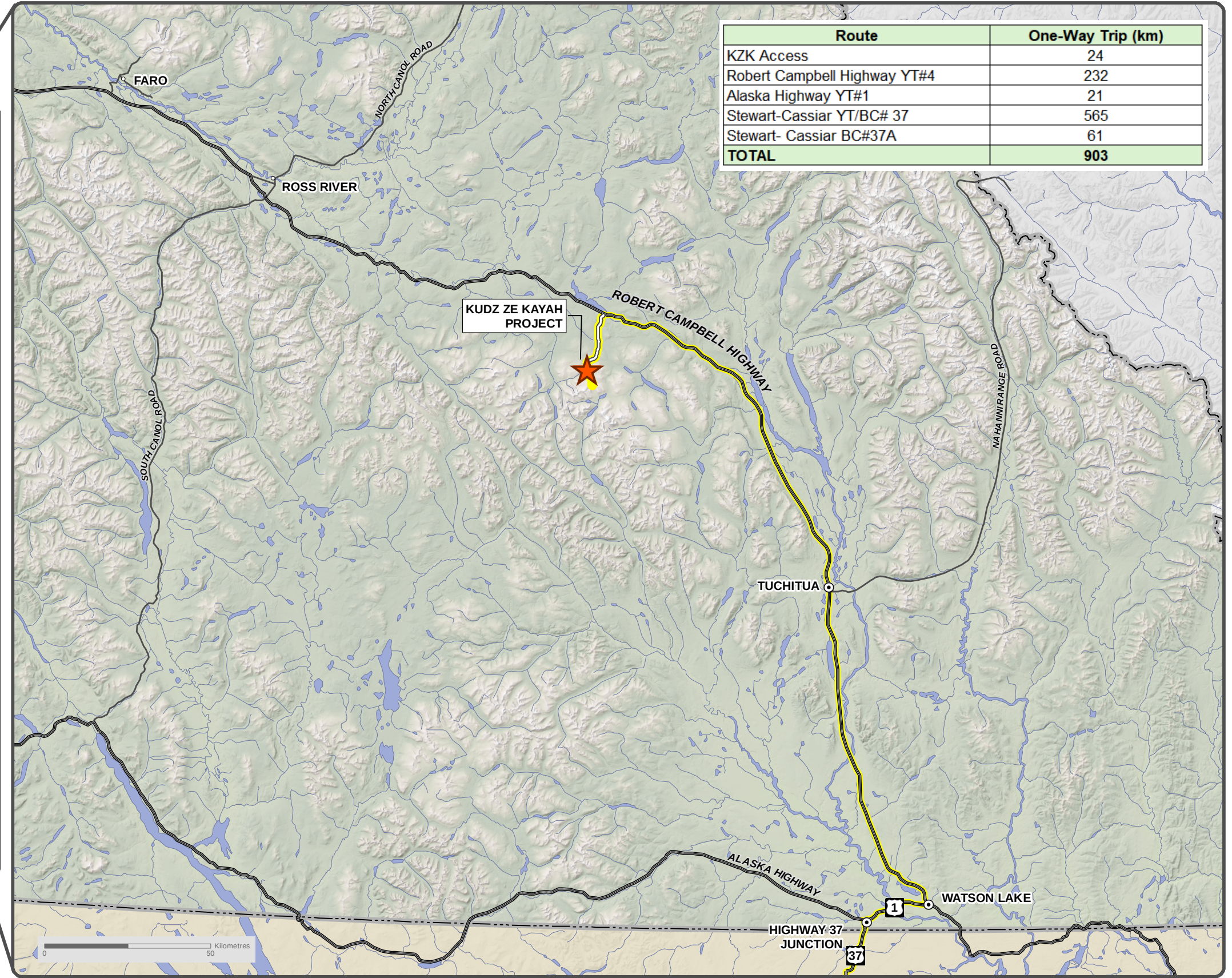
HPM concentrate will not be stored in bulk in the site concentrate storage shed. It will be loaded into sealable containers to minimize potential exposure of HPM concentrate to the environment. Containers will be loaded by front end loader in a segregated HPM concentrate loading area in the concentrate loadout facility. The HPM concentrate loading facility will also contain a container washing system to remove any fugitive concentrate spills. Loaded containers will be stored outside the Process Plant building, then loaded onto trucks when required for transport to port.

Copper and zinc concentrates will be loaded into bulk haulage trailers with sealable lids to prevent loss of concentrate from the trailer to the environment during transportation. Loading of copper and zinc concentrates will be completed by front end loader in the concentrate storage shed. Before leaving the concentrate storage shed, all trucks will be inspected for loose concentrate and brushed down as required to ensure that any concentrate spillage is removed from the truck and trailers.

A centralized dust collection system will be provided to collect and filter out fugitive dust emissions from the bulk storage area. The system will have the capacity to provide ventilation (i.e. minimum air changes) to the enclosed space given the operation of diesel powered materials handling equipment in it.

In general, concentrate will be hauled to Stewart World Port in Stewart, British Columbia via Watson Lake, Yukon for shipping to market (Figure 6-1). During the period of seasonal payload restrictions (due to spring break up) reduced loads will be delivered to a transfer facility established by the concentrate haulage contractor at Watson Lake.

Should concentrates be sold within the North American market, concentrate may be hauled to a rail siding at Fort Nelson for subsequent rail haulage to the customer, if that transportation route is considered to be more efficient than that of sea freight.



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Datum: NAD 83; Map Projection: UTM Zone 9N

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- Towns and Communities
- ⦿ Transportation Route Marker
- Transportation Route

- Primary road
- Secondary road



KUDZ ZE KAYAH PROJECT

FIGURE 6-1 CONCENTRATE TRANSPORTATION ROUTE

MAY 2024

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7 POWER PLANT

Power for the Construction phase of the Project will be facilitated through the use of temporary diesel generators. The specific quantity and sizes of generators required will be determined during Project execution planning following receipt of regulatory approvals.

The permanent power solution for the Operational phase of the Project is planned to be a site based dual-fuel (natural gas and diesel) Power Plant, located adjacent to the Process Plant. The current design generator configuration is for five generators in N+1 configuration with a smaller emergency diesel generator for black start capability. Generators will be approximately 5.5 MW capacity, with final generator selection to be confirmed with vendors during execution of the Project. The generators will be rated 3 phase, 60 Hz, 13.8 kiloVolt (kV). Appropriate noise enclosures will be used for all generators and other stationary noise generating equipment such as boilers and compressors.

Initially only three generators will be installed, in an N+0 configuration. When underground mining operations commence site power demand will increase and an additional two generators will be installed at this time to provide an N+1 configuration. The civil infrastructure for the additional two generators will be constructed at the time of initial Power Plant development. The general arrangement of the planned Power Plant is shown in Figure 7-1.

The Power Plant includes 13.8 kV switchgear complete with all main and distribution circuit breakers. The 13.8 kV switchgear will feed the Process Plant directly via underground cable without any intermediary transformer. Power will be stepped down to utilization voltages via local transformers (13.8 kV / 600 V).

A 13.8 kV / 600 V transformer is also located adjacent to the Power Plant for distribution of 600 V power to local fuel storage and administration facilities.

Full heat recovery from the generators including jacket water heat exchangers and exhaust gas heat recovery units has been included in the design. The waste heat will be used to heat the Process Plant Building through a glycol loop.

Power required for main generator auxiliaries on black start operation will be supplied by a 750 kW, 13.8 kV diesel fueled black start generator.

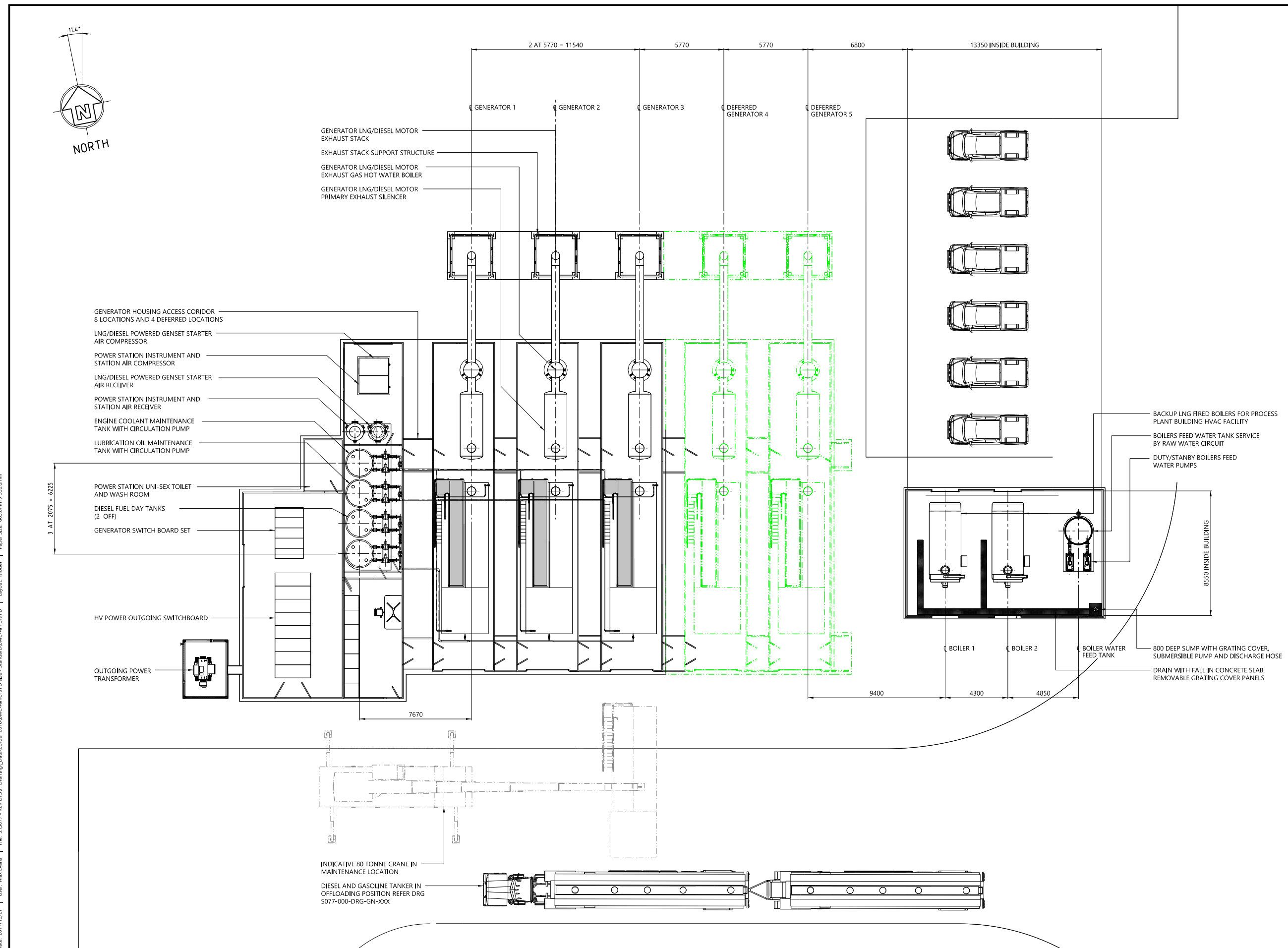
Total installed power generation capacity of the Power Plant is expected to be 27.5 MW and installed load of 22 MW. Operating load during normal day to day use is expected to be approximately 13.7 MW.

In the event that there is a delay in the procurement or construction of the permanent power station, it is expected that a temporary rental diesel power plant will be installed on site to allow for commissioning of the processing plant and initial operations. As the permanent power station is progressively commissioned, the rental diesel power plant will be removed from site.

Power for the camp facility will be through a standalone diesel fuelled 1MW generator installation. The specific number and size of generators will be determined during final engineering but is expected to be 2 x 500kW generators.

Power to the mine workshop and refuelling area will initially be provided through a standalone diesel fuelled generator installation. The specific number and size of generators will be determined during final engineering but is expected to be one 500kW generator. At the commencement of underground mining, when the generation capacity of the power plant is increased it is planned that the mine workshop and refuelling facilities will be connected to the main power station and the diesel generator removed from service.

During the detailed design phase of the Project, optimization of fuel efficiency and minimization of green house gas emissions (including mobile plant and other site infrastructure and activities) will be considered. Options for renewable energy sources (primarily solar energy) will also be evaluated although the climatic conditions at site are not well suited.

[illegible]

8 REFERENCES

- BMC Minerals Ltd. (BMC). 2026a. *Kudz Ze Kayah Project – Wildlife Protection Plan*.
- BMC Minerals Ltd. (BMC). 2026b. *Kudz Ze Kayah Project – Sediment and Erosion Control Management Plan*.
- BMC Minerals Ltd. (BMC). 2026c. *Kudz Ze Kayah Project – Mine Development and Operations Management Plan*.
- BMC Minerals Ltd. (BMC). 2026d. *Kudz Ze Kayah Project – Hazardous Materials Management Plan*.
- BMC Minerals Ltd. (BMC). 2026e. *Kudz Ze Kayah Project – Waste Rock and Overburden Management Plan*.
- BMC Minerals Ltd. (BMC). 2026f. *Kudz Ze Kayah Project - Tailings Management Plan*.
- BMC Minerals Ltd. (BMC). 2026g. *Kudz Ze Kayah Project – Water Management Plan*.
- BMC Minerals Ltd. (BMC). 2026h. *Kudz Ze Kayah Project – Waste Management Plan*.
- Government of Canada. 1994. *Migratory Birds Convention Act, 1994*. SC 1994, c. 22.
- Palmer, 2023. *Update to Permafrost Distribution Mapping for the Kudz Ze Kayah Project, Yukon*. Prepared for BMC Minerals Ltd.

APPENDIX A: LIST OF PLANNED STANDARD OPERATING PROCEDURES

Preliminary List of Planned Standard Operating Procedures: Engineering / Maintenance	
Adjust & Set Jaw Crusher Gap	
Calibrate & Change Density Gauge	
Calibrate Belt Scale	
Calibrate Control Valve	
Calibrate Pressure Transmitter	
Change Conveyor Belt Idlers	
Change Flame Proof Motor	
Change Grizzly Bars	
Change Jaw Crusher Turning Plates	
Change Magnetic Separator Drum	
Change or Inflate Vehicle Wheel	
Change Plumer Block on Conveyor Belt	
Changing & Turning Fixed Plates on Jaw Crusher	
Changing Pipes & Valves	
Cleaning Mill Bearing with Flammable Solvent	
Electrical Fire & CO2 Discharge	
Fault Find Mill Lubrication System	
Inspect & Calibrate Belt Scales	
Inspect & Change Flow Switch	
Inspect & Change Pullwire Switch	
Inspect & Clean MCC	
Inspect & Install Chute Components	
Inspect & Maintain Dust Collector Fan	
Inspect & Maintain Emergency Generator	
Inspect & Maintain Overhead Crane	
Inspect & Maintain PLC	
Inspect & Service Mill Motor Brushgear	
Inspect or Change Current to Pressure Converter	
Inspect or Change Level Probe	
Inspect or Change VSD	
Inspect Scada Communication	
Install Lance in Thickener	
Lifting & Rigging	
Lubricating Jaw Crusher	
Maintain Electrical Hoists	
Maintain Transformer	
Maintenance Inspection	
Maintenance of Electrical Reticulations	
Operate & Maintain Air Impact Tools	
Operate & Maintain Angle Grinder	

Operate & Maintain Generator
Operate & Maintain HV Substation
Operate Cutting Torch
Operate Dust Suppression Water Trailer
Operate Electrical Hand Held Drill
Operate Electromatic Equipment
Operate Welding Machine
Operating Hydraulic Equipment
Overhaul a Pump
Overhead Crane Inspection & Maintenance
Packing a Pump
Radioactive Sources
Remove & Replace Chute Liners
Remove & Replace Worn Feed Chute Liners
Remove or Replace Magflow
Remove or Replace Nuclear Density Transmitter
Repair Conveyor using Belt Clips
Repair High Mast Lights
Repair or Replace Worn Belt Scrapers
Repair Plant Lights
Replace Actuated Knife Components
Replace Bearing on Conveyor Pulley
Replace Belt Scale Load Cell
Replace Bench Grinder Grinding Stones
Replace Conveyor Bearing, Pulley or Gearbox
Replace Conveyor Belt Idler Frames
Replace Hose in Peristaltic Pump
Replace Mill Motor
Replace Motor
Replace Motor Using a Crane
Replace Motor Using a Crawl Beam
Replace Motor Using a Manitou
Replace Pressure Transmitter
Replace V-Belts
Rubber Lining Installation & Repairs
Safe Use of Ladder
Setup & Calibrate Level Transmitter
Substation Maintenance & Housekeeping
Switching & Racking High Tension Breaker
Test Conveyor Speed Switch
Test Earth Leakages & Buildings
Test Medium Tension Joints & Termination

Test Metal Detector
Test or Replace Belt Alignment Switches
Test Solenoid Valve
Transformer Maintenance
Use Solder Iron
Welding & Cutting of Materials
Working at Heights

Preliminary List of Planned Standard Operating Procedures: Operations
Barring the Mill
Calibrate Reagent Pump
Change Pipes or Valves
Clean Process Tanks
Clean Vibrating Grizzly
Dosing Copper Collector
Dosing Frother
Dosing Lead Collector
Dosing Zinc Collector
Load Balls into Mills
Load Ceramic Beads into Regrind Mill
Maintain Cyclone
Mixing & Dosing CuSO ₄
Mixing & Dosing Cyanide
Mixing & Dosing Flocculant
Mixing & Dosing Lime
Mixing & Dosing SMBS
Mixing & Dosing ZnSO ₄
Operate Conveyor
Operate Filter Press
Operate Rock Breaker
Operate Sampler
Operate Thickener
Power Failure Emergency Plan
Reagent Spills
Reagent Spot Checks
Remove Tramp Metal from Self Cleaning Belt Magnet
Replace Screen Panels
Sample Submission at Assay Lab
Sampling Concentrate Bunkers
Start & Stop Flotation Section
Start & Stop Regrind Circuits
Start & Stop Tailings Section
Start Concentrator Plant
Start Mill Section
Start ROM Section

Stop & Start Pebble Crusher
Stop Concentrator Plant
Stop Mill Section
Stop ROM Section
Stop, Clean & Safe Declaration of Tip Bin Maintenance
Unblock a Chute
Unblock Jaw Crusher
Unblock Reagent Lines
Unchoke Pumps, Pipelines & Cyclones

APPENDIX B: TABLE OF CONCORDANCE

Reference No.	Proponent Commitment / Mitigation	Where addressed
YESAB R22	In the event of the design outputs being consistently unmet then the Mill Development and Operations Plan will be adjusted accordingly and if necessary modifications made to the thickening and filtration circuits. This is normal practice in the commissioning process for new mines.	Section 4.5 of the Process Plant Development and Operations Plan
RRDC Review of Draft Management Plan	Process Plant in particular will require dewatering; the details of this will be established during detailed engineering.	Section 2 of the Process Plant Development and Operations Plan
BMC Response to Public Comments on the DSR	BMC will investigate carefully the potential for future use of island (roof) solar power systems, but these will not be a major impact on the environmental impact of the Project nor will they appreciably alter greenhouse gas generation.	Chapter 7 of the Process Plant Development and Operations Plan
Project Proposal Chapter 6 (BMC, 2017a)	Crusher enclosure, and material handling and transfers at the process plant facility will occur indoors	Section 4.1 of the Process Plant Development and Operations Plan
Project Proposal Chapter 6 (BMC, 2017a) and BMC Response on Draft Screening Report (BMC, 2020)	Cover over the live portion of coarse ore stockpile	Section 3.1 of the Process Plant Development and Operations Plan
Project Proposal Chapter 6 (BMC, 2017a)	Use of dust collectors and proper chute design to prevent air entrainment of dust	Section 4.1 of the Process Plant Development and Operations Plan
Project Proposal Chapter 6 (BMC, 2017a)	Dust extraction with conveyance to and processing in dust collectors	Sections 4.1 and 6 of the Process Plant Development and Operations Plan
Project Proposal Chapter 6 (BMC, 2017a)	Cover or enclosure of conveyors or conveyor galleries.	Section 4.1 of the Process Plant Development and Operations Plan
Project Proposal Chapter 6 (BMC, 2017a)	Installation of water sprays at conveyor transfer points as required (unless not practicable or safe to do so due to sub-zero temperatures.)	Section 4.1 of the Process Plant Development and Operations Plan
Project Proposal Chapter 6 (BMC, 2017a)	Use filters, scrubbers, and other pollution control devices at processing facilities.	Sections 4.1 and 6 of the Process Plant Development and Operations Plan
Project Proposal Chapter 7 (BMC, 2017a)	Noise dampening enclosures for boilers, generators, and compressors.	Chapter 7 of the Process Plant Development and Operations Plan
Project Proposal Chapter 7 (BMC, 2017a)	Crusher, grinding mills, conveyor shielding (enclosed building).	Sections 4.1 and 4.2 of the Process Plant Development and Operations Plan

Project Proposal Chapter 7 (BMC, 2017a)	Equip all vehicles and internal combustion engines with appropriate muffler systems.	Section 3.1 of the Process Plant Development and Operations Plan
Project Proposal Chapter 7 (BMC, 2017a)	Ensure regular equipment maintenance including lubrication.	Section 3.1 of the Process Plant Development and Operations Plan
Project Proposal Chapter 7 (BMC, 2017a)	Keep noisy equipment inside buildings or sheds and/or near ground level whenever possible.	Sections 4.1 and 4.2 of the Process Plant Development and Operations Plan
Project Proposal Chapter 7 (BMC, 2017a)	Maintain natural cover (vegetation) between noise sources and the camp.	Section 2 of the Process Plant Development and Operations Plan
Project Proposal Chapter 7 (BMC, 2017a)	Maintain a noise control standard when procuring equipment.	Section 3.1 of the Process Plant Development and Operations Plan
Project Proposal Chapter 11 (BMC, 2017a)	Minimize land clearing to the areas necessary for Project Footprint.	Section 2 of the Process Plant Development and Operations Plan