



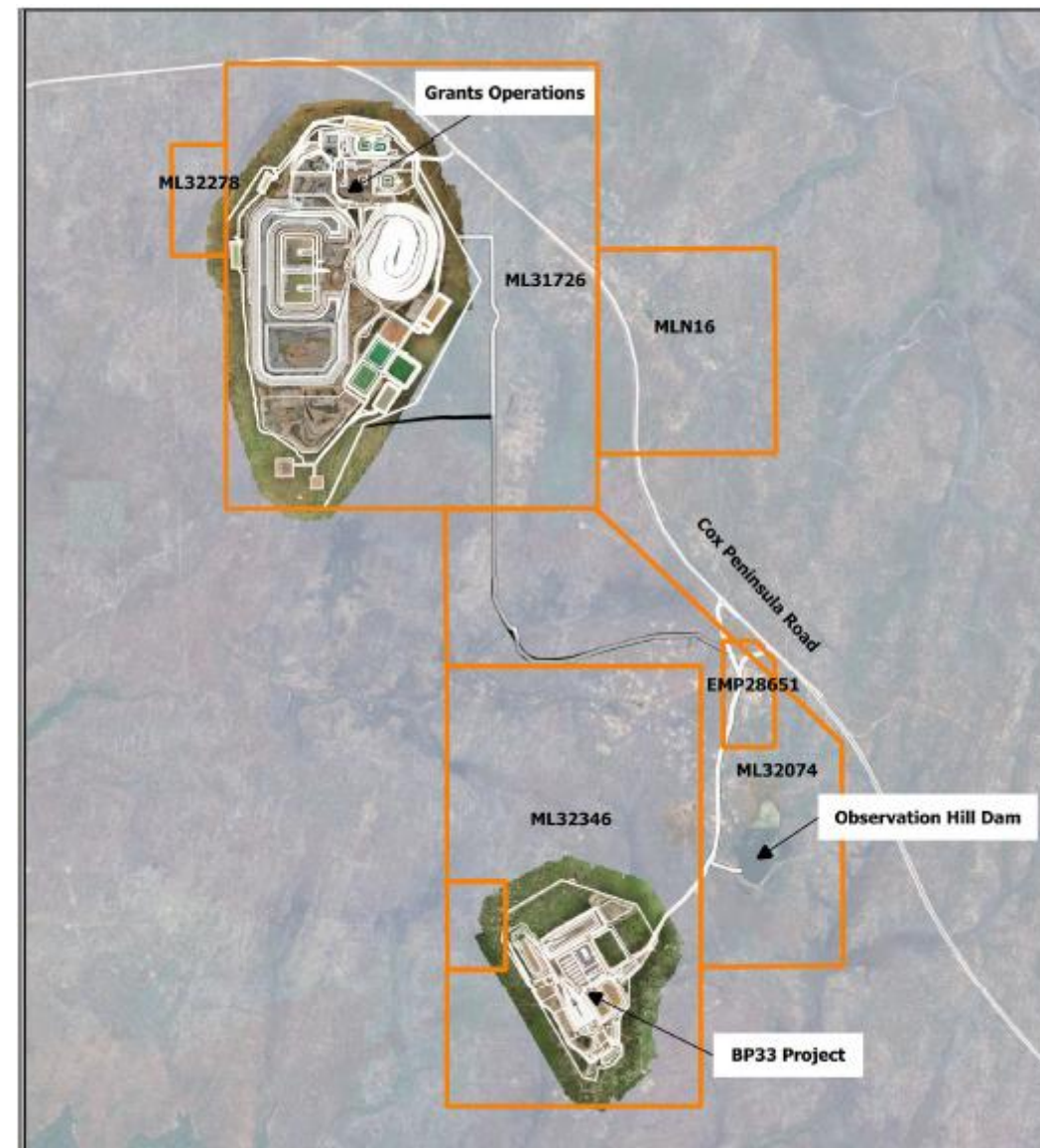
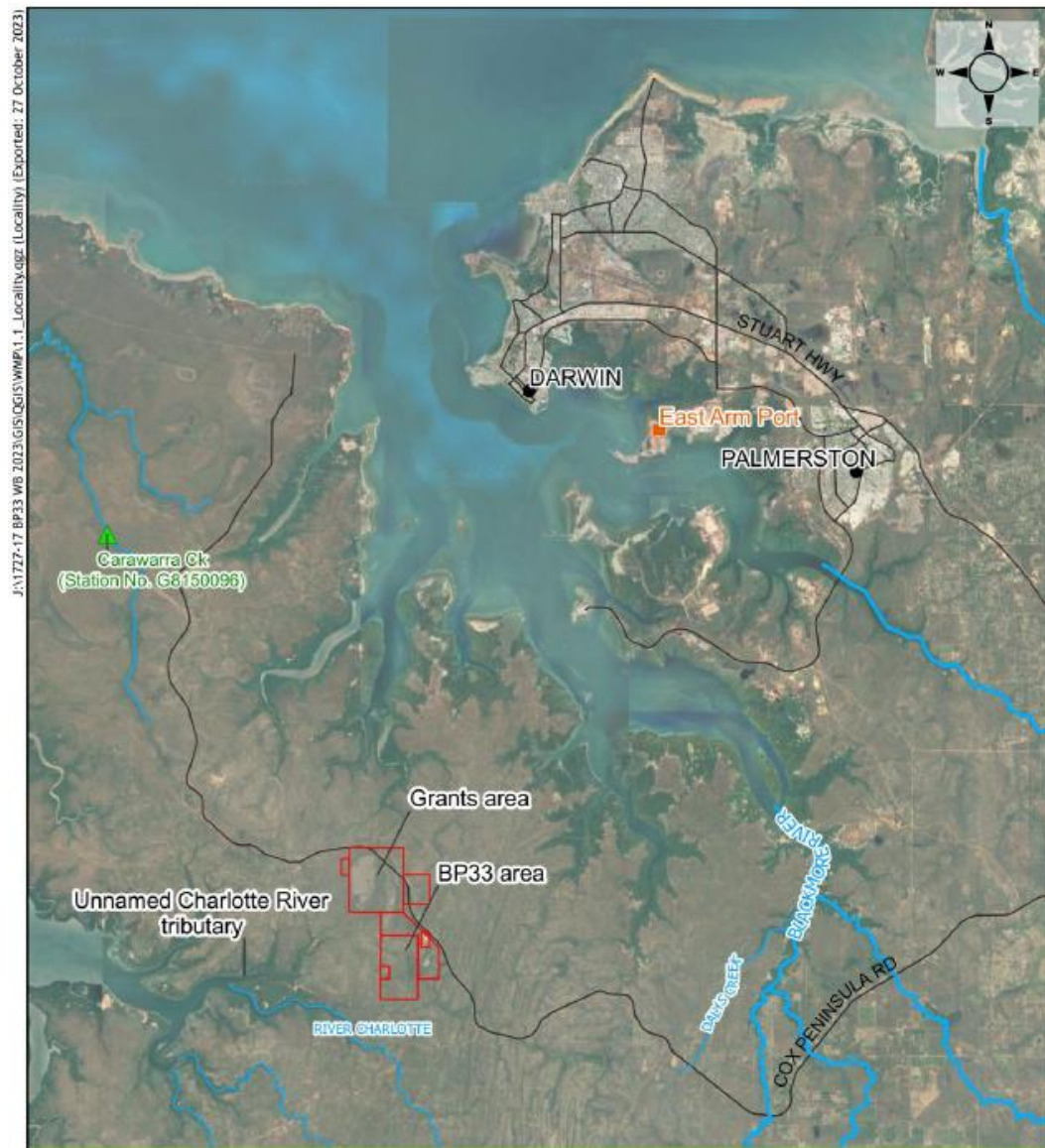
Finniss Lithium Project – Proposed extension of BP33 Underground Mine

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Environmental Assessment Forum

10 June 2026

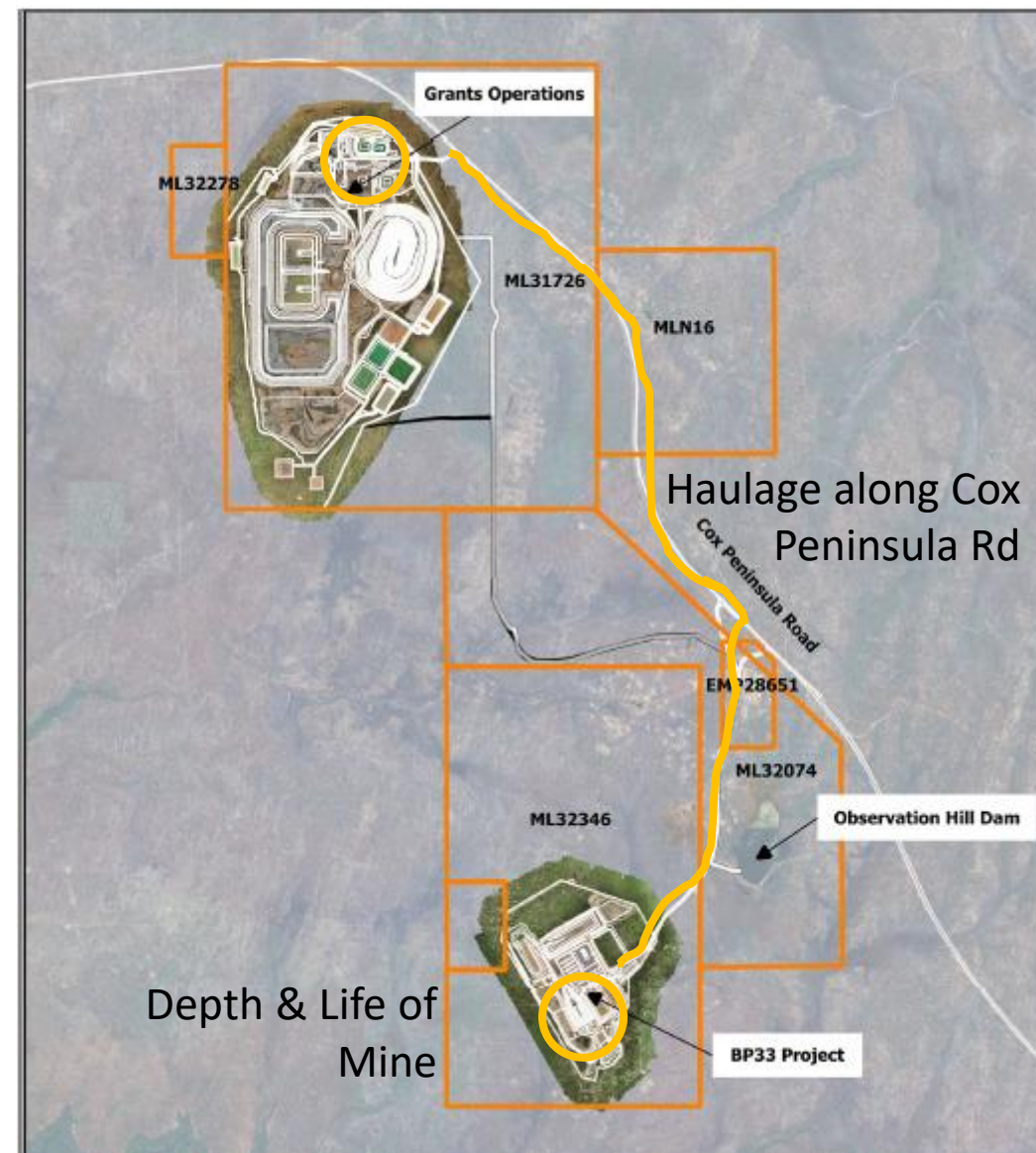
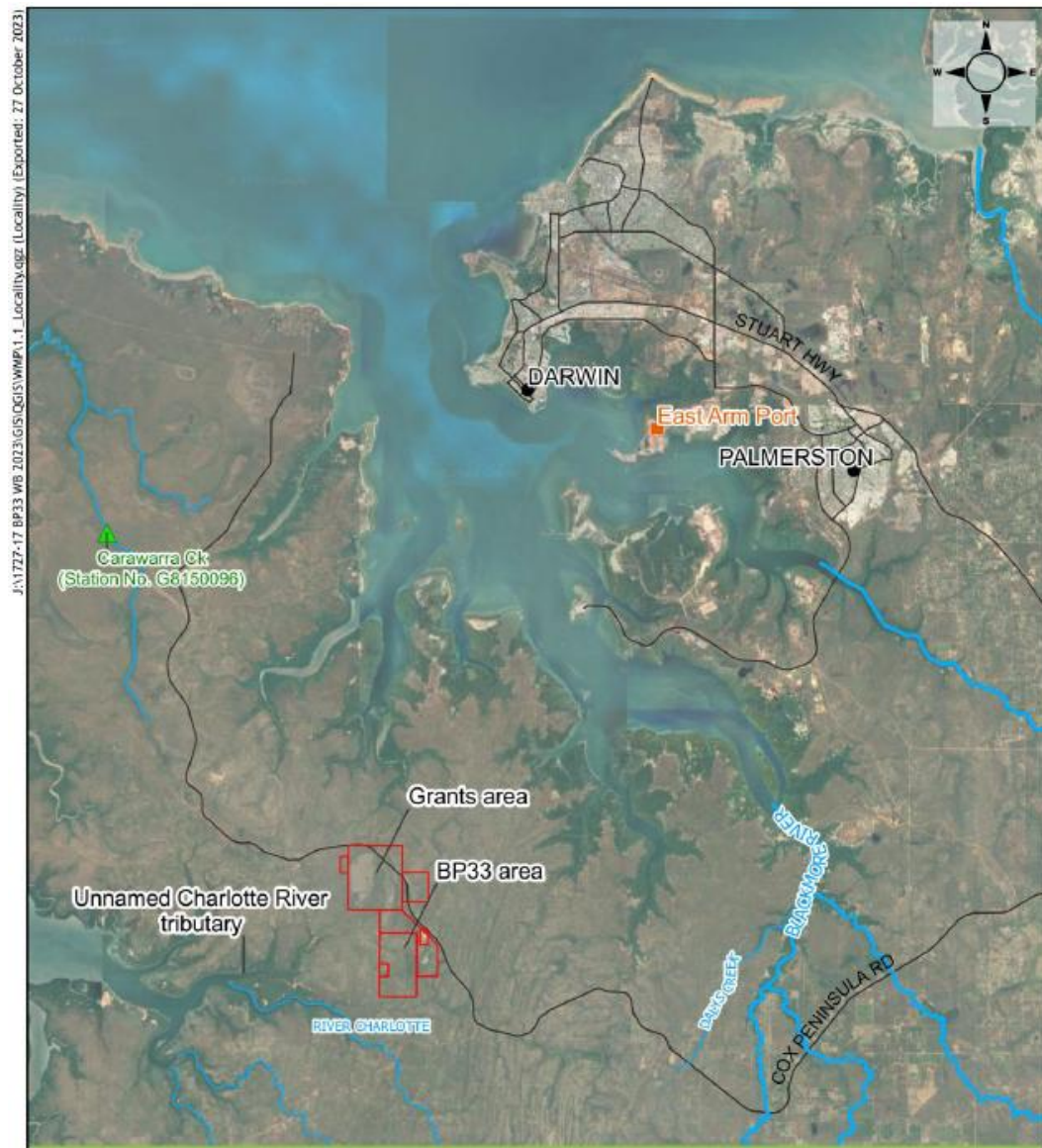
Finniss Lithium Projects: Location & Existing Activities



Summary of Project

- **Proposed variation of BP33 underground mine**
 - Increased depth of mine from 320 m to 850 m below ground level
 - Extended life of mine from 4 years to 12 years at both mine sites (Grants and BP33)
 - Haulage of BP33 ore and Grants processing rejects along Cox Peninsula Road
 - Use of paste backfill for underground mining
 - Transfer of fines tailings ('slimes slurry') via pipeline from Grants processing plant to BP33 paste plant
 - **Update: transfer and storage of slimes has been removed from proposed operating design and replaced with inclusion of paste plant crusher that will generate fines from dry stack tails ('rejects') – Non-Significant Variation has been prepared and not included here**
- **Existing approved activities (EP2020/001-001, April 2022)**
 - Underground mine to 320 m below ground level
 - Life of mine 4 years
 - Processing of BP33 ore at Grants processing plant
 - Transfer of BP33 ore along an internal haul road (currently a poorly maintained track that is seasonally impassable)
 - Transfer of mine affected water from BP33 to Grants
 - Grants open pit mine becomes pit void lake once ore is fully extracted

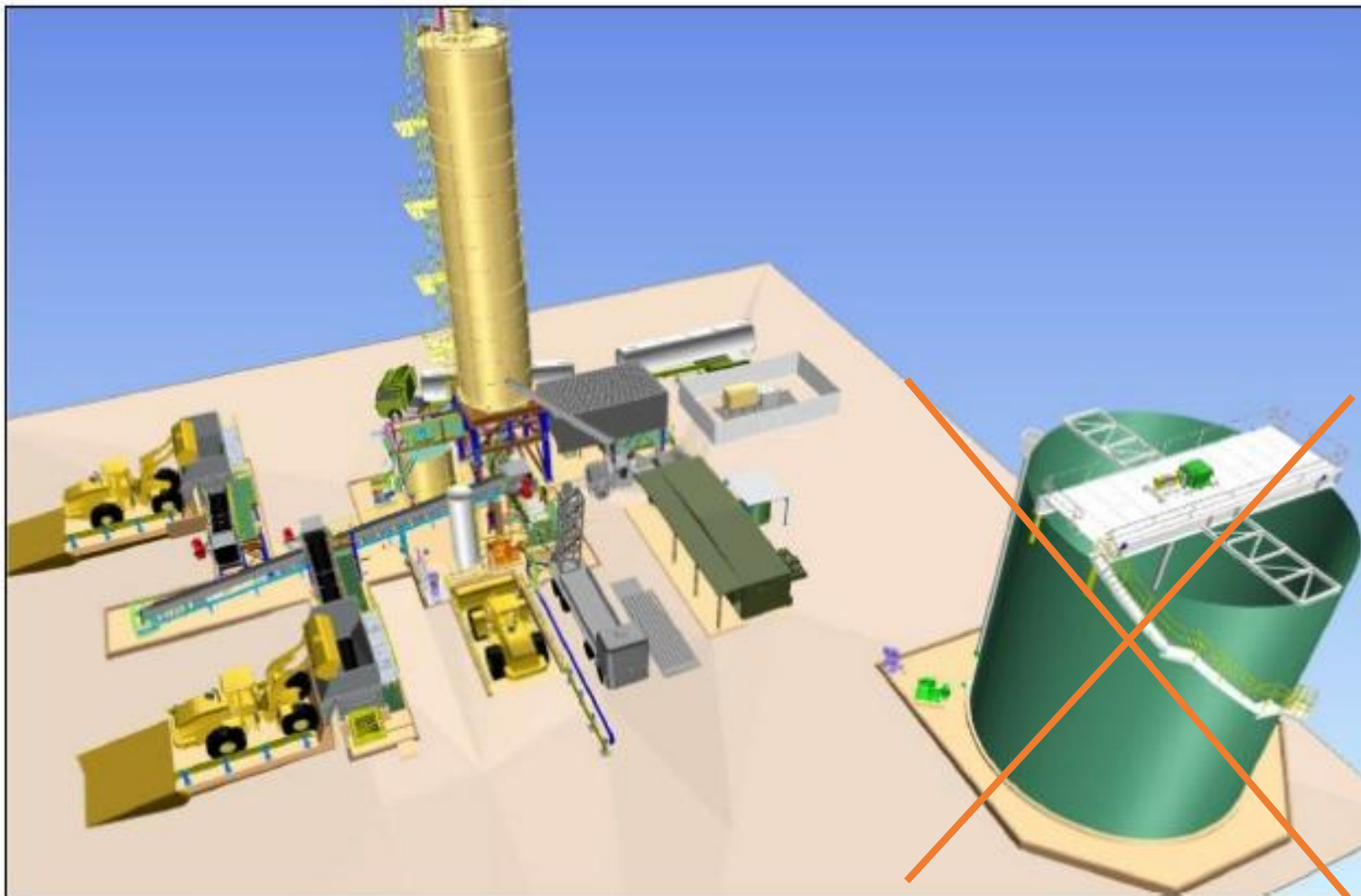
Finniss Lithium Projects: Location & Proposed Activities



Environmental Factors – Referral

Factor	Proposed activity	Potential Risks and Impacts
<u>LAND</u> Terrestrial environmental quality	Paste backfill mining method Waste rock from deeper sections of mine	Paste backfill remains belowground upon mine closure Loss of paste containment affecting soils Acid mine drainage
<u>LAND</u> Terrestrial ecosystems	Haulage of ore and dry rejects along Cox Peninsula Road Surface water from Observation Hill Dam (as per surface water extraction licence) Dewatering of BP33 mine	Vehicle strike of threatened fauna Impact to riparian vegetation due to water use Impact to riparian vegetation due to dewatering
<u>WATER</u> Hydrological processes	Extended use of water for operations Modification of surface structures at BP33 mine site (65.9 ha to 76.8 ha) Dewatering to access deeper mining area	Impact to riparian vegetation due to water use Alter local drainage regimes Increased cone of depression with increased depth of mine
<u>WATER</u> Aquatic ecosystems	Raw water from Observation Hill Dam (as per surface water extraction licence) Mine dewatering associated with increased depth of BP33 mine	Impact to riparian vegetation due to water use Increased cone of depression with increased depth of mine
<u>WATER</u> Inland water environmental quality	Increased ground disturbances at BP33 mine (65.9 ha to 76.8 ha) Extended LOM for operations including water discharges	Increased sediment loads to receiving waterways Impact to receiving waterways with extended LOM
<u>AIR</u> Air quality	Stockpiling and haulage of dry rejects	Impact to users of Cox Peninsula Road
<u>AIR</u> Atmospheric emissions	Scope 1 Greenhouse Gas Emissions for integrated operations exceeds Safeguard threshold for tonnes of carbon dioxide emitted from year 3 of project (2028)	Not a substantial or material change from the existing approved separate BP33 and Grants Proposals
<u>PEOPLE</u> Community & economy	Shared use of NT public road for haulage of ore and rejects Operations workforce over Life of Mine (increase from 4 to 12 years)	Impact to users of Cox Peninsula Road

Paste Backfill & Rejects Handling – the Activities



Paste Backfill – Management Controls

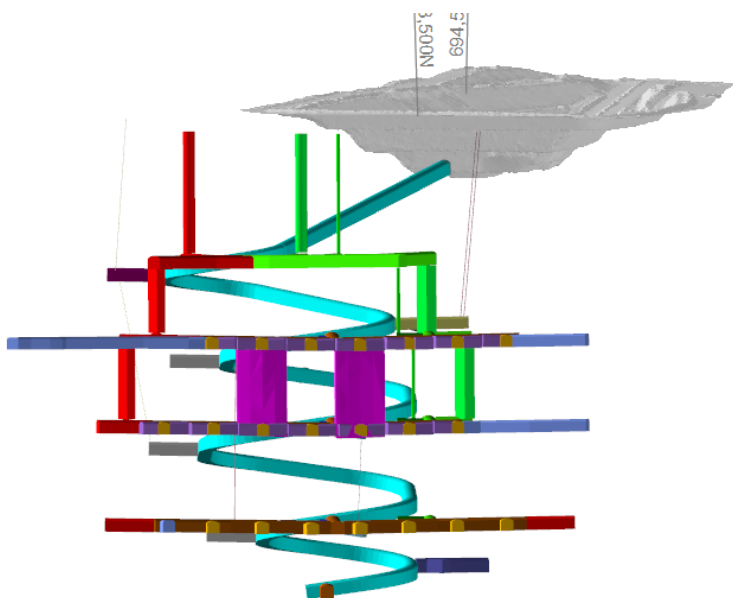
Control	Description
Controlled production rate	A constant rate of production
Operating pressure of the reticulation system	Designed for a constant flow so material does not settle in the delivery system, and cause blockages
Maintenance of reticulation system	Planned periodic flushing to prevent blockages
Plant automation software	Live monitoring of pipe pressures and flow
Reticulation system materials	Steel reinforced composite polyethylene pipe to reduce likelihood of rupture
Paste plant in contained footprint	Concrete bunded footprint for containment of losses and spills
Reticulation system underground	Loss of containment will be below ground or in the paste plant bunded area
Composition of paste	Cement rejects and water
CCTV and Radio communications	Visual monitoring of the reticulation system

Rejects Handling – Management Controls

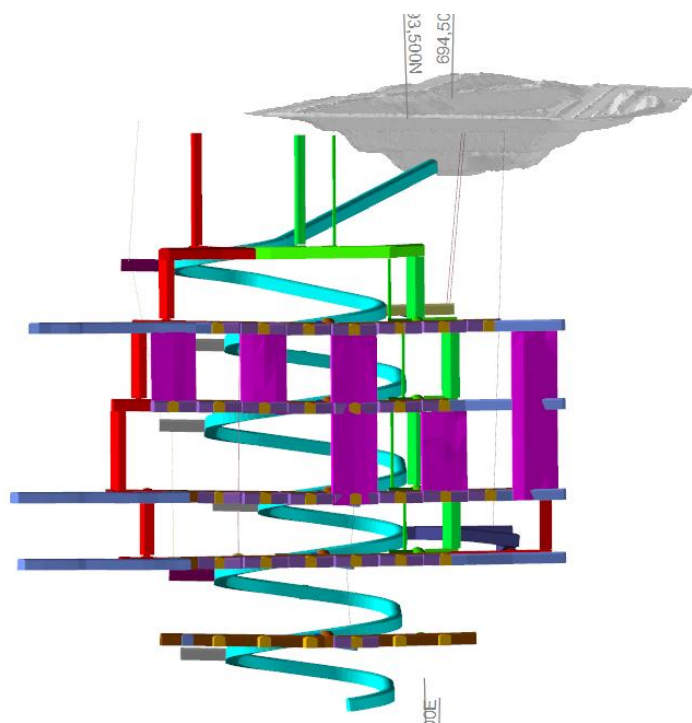
Control	Description
Rejects material	Benign (refer Study between CL & NT Govt)
Stockpiling	Dust management practices (as per Dust Management Plan)
Haulage	Trucks are covered while transferring rejects Existing public road for haulage vs development of internal private road (reduces risk of fauna strike)

Underground Mining at BP33 Mine: Stope mining

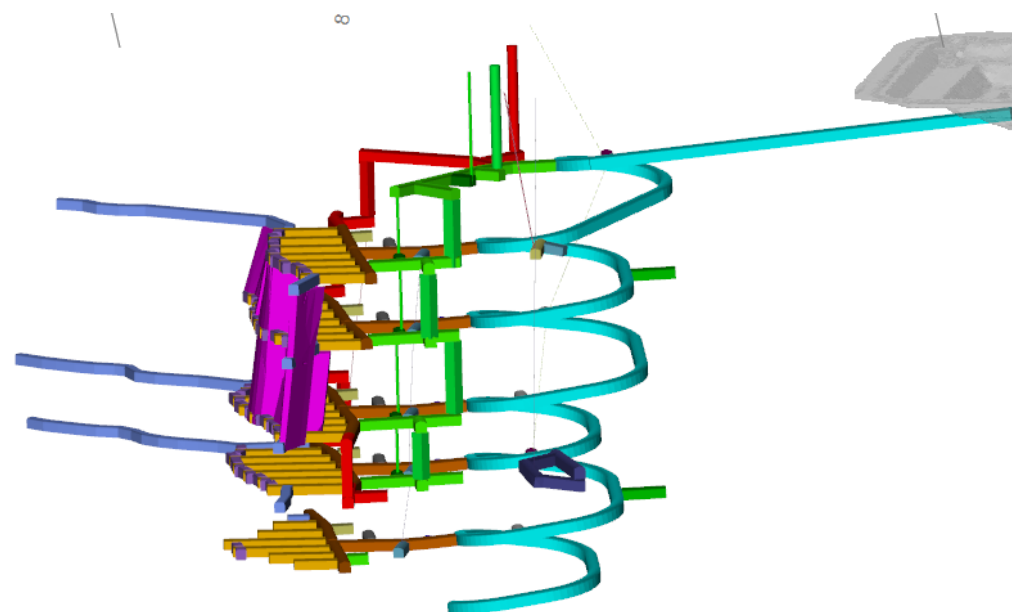
Time 1: July 2027



Time 2: December 2027



Time 2: December 2027 (alternate view)



Underground Mining at BP33 Mine: Dewatering, Waste Rock

Planned progression over depth

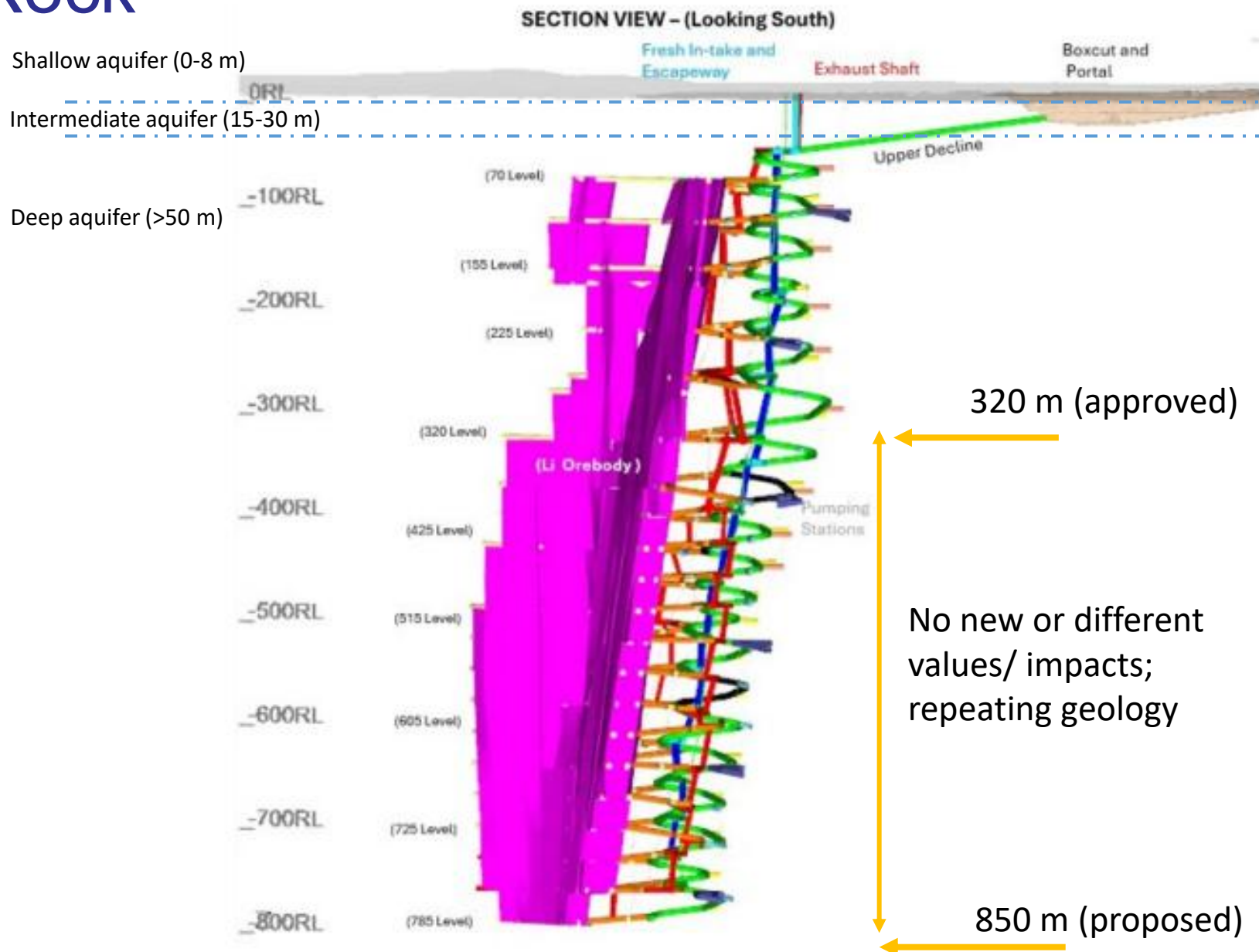
Dewatering is progressive (not all at once)

Paste backfill of mined voids reduces
rewatering of open areas underground

Dewatering uses sump & pump system per
stope that is moveable and recoverable

Rates of dewatering monitored through
centralised collection point in the Box Cut
Sump

Hydrogeology consistent with depth



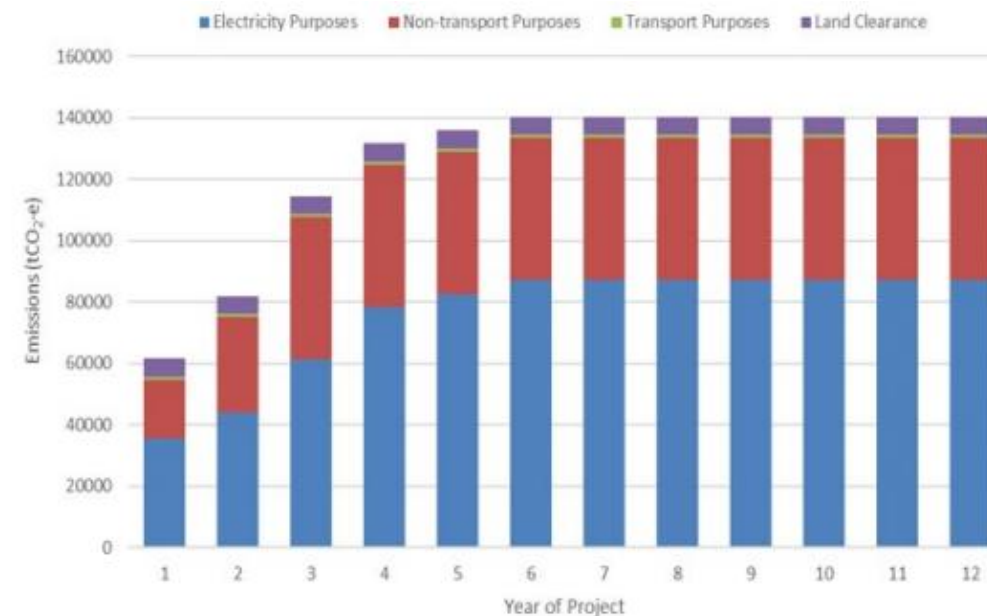
Underground Mining – Management Controls

Control	Description
Mine plan	Includes dewatering plan; dewatering stope by stope
Sump and pump water handling system	Sump and pump water handling system designed and implemented for each stope
Box cut sump	Centralised collection point for water from mine dewatering
Groundwater monitoring program	Established groundwater monitoring program with baseline data Deep groundwater monitoring bore to be established
Waste Discharge Licence 253	Instructs on water quality requirements of mine affected water to be discharged to receiving waterway
Paste walls	Serve to manage re-saturation of mined out areas
Waste Rock Dump & Acid Mine Drainage Management Plan	Existing approved WRD & AMD MP is directly relevant to the waste rock planned to be encountered in the deeper mine sections

Scope 1 Greenhouse Gas Emissions

Factor		Risk and/or Impact
AIR	Atmospheric emissions	Integrated operations unmitigated is predicted to breach the National Safeguard Threshold (100,000 tCO ₂ -e) in Year 3 of the project

THEME - Factor	Environmental values and sensitivities	Does the proposed action have the potential to significantly impact values or sensitivities?
AIR Atmospheric processes	<u>GHG emissions – Scope 1</u> Combustion sources	YES - Scope 1 emissions sources from combustion fuel consumption. Most of the Scope 1 GHG emissions are associated with diesel power generation and contributes a moderate % of tCO₂-e annually to overall Proposal GHG emissions. - Not a substantial or material change from the existing approved separate BP33 and Grants Proposals contribution to Scope 1 GHG emissions, however when combined as integrated operations, by year 3, annual reporting of Scope 1 emissions against a Safeguard Mechanism baseline will be required.



Control	Description
Emissions monitoring and reporting	Ongoing monitoring and reporting to verify predicted emissions
Detailed operations energy study	Required to understand alternative energy
Greenhouse Gas Abatement Plan	To be prepared by end of 2027



