

APPENDIX A

Consolidated Project Description

Consolidated Project Description

A1 Introduction

This chapter provides a summary of approved operations under PA 11_0060 (as modified), consistent with *State significant development guidelines – preparing a modification report* (DPIE, July 2021). The Consolidated Project Description should be read in conjunction with the documents listed in **Section A3** of this chapter.

A2 Project Overview

The approved operations involves the consolidation and replacement of PA 06_0026 (Northparkes E48 Project, as modified) and DA 11092. The approved operations, as modified (incorporating MOD 8) includes:

- continuation of approved underground block cave mining, with the addition of sub-level caving, in the E48 and E26 ore bodies, and associated underground infrastructure
- development of underground block caving in the E22 resource beneath the E22 open cut void
- campaign open cut mining through development of five open cut resources including:
 - development of four small open cut pits E31, E31N, E28, E28N
 - E26 open cut which is located in an area of previous underground block cave subsidence
- amendments to the configuration of TSFs including the development of the Rosedale TSF (TSF 3), including TSF2 embankment buttressing and extension to Infill TSF
- development of waste rock stockpile areas for the management of open cut waste rock which can be utilised in the development of TSFs
- establishment of temporary waste rock stockpile areas for the E31 and E31N pits
- use of waste rock (including stockpiled material) in the development, lifts and buttressing of TSFs
- continuation of approved ore processing infrastructure up to a capacity of 8.5 million tonnes per annum (Mtpa)
- operation of railing loading facilities at Goonumbla rail siding
- road haulage of concentrate to:
 - the Goonumbla rail siding
 - to Parkes National Logistics Hub and
 - other rail loading facilities during periods when the use or efficacy of the Goonumbla rail siding and Parkes National Logistics Hub for transporting concentrate to Port is restricted due to significant disruptions to the rail network

- continued use of existing mine infrastructure and site facilities, upgrades to ore conveyor, hoisting and processing infrastructure, construction and operation of an additional ball mill and new secondary crushing building, upgrading and relocation of power supply, relocation of existing Contractor Area within the Approved Operational Area
- construction and use of a new underground portal access (including associated drive, conveyor and other ancillary infrastructure) for E22 underground mining operations
- establishment and use of rehabilitation material (vegetation, topsoil and subsoil) stockpiling areas within the Approved Operational Area
- establishment of clay and filter material borrow pits for TSF construction and lifts
- continuation of existing approved water supply and management processes, with relocation of main water supply pipeline
- maintenance, replacement and relocation of water management and services infrastructure (as required, within the limits of the Approved Operational Area)
- activities ancillary to mining, waste rock management and operation of tailings storage facilities within the Approved Operational Area (including, vehicle washdown areas, water management infrastructure (such as drains, pipelines, and dams), internal access and haul roads and temporary support facilities such as site offices, crib rooms and self-contained toilet facilities, temporary construction and decommissioning laydown areas)
- development of a new access road (with access control facilities and associated carparking) to service all mine related traffic entering the site
- upgrade of McClintocks Lane and associated intersection works on Bogan Road
- continuation of approved mining operations until the end of 2032
- rehabilitation and closure of the mine site after the end of the operational life of the Project in accordance with relevant approvals.

Table A1 below provides a summary of the key features of the approved operations (as modified). The key components of approved operations are shown in **Figures 1 to 4**.

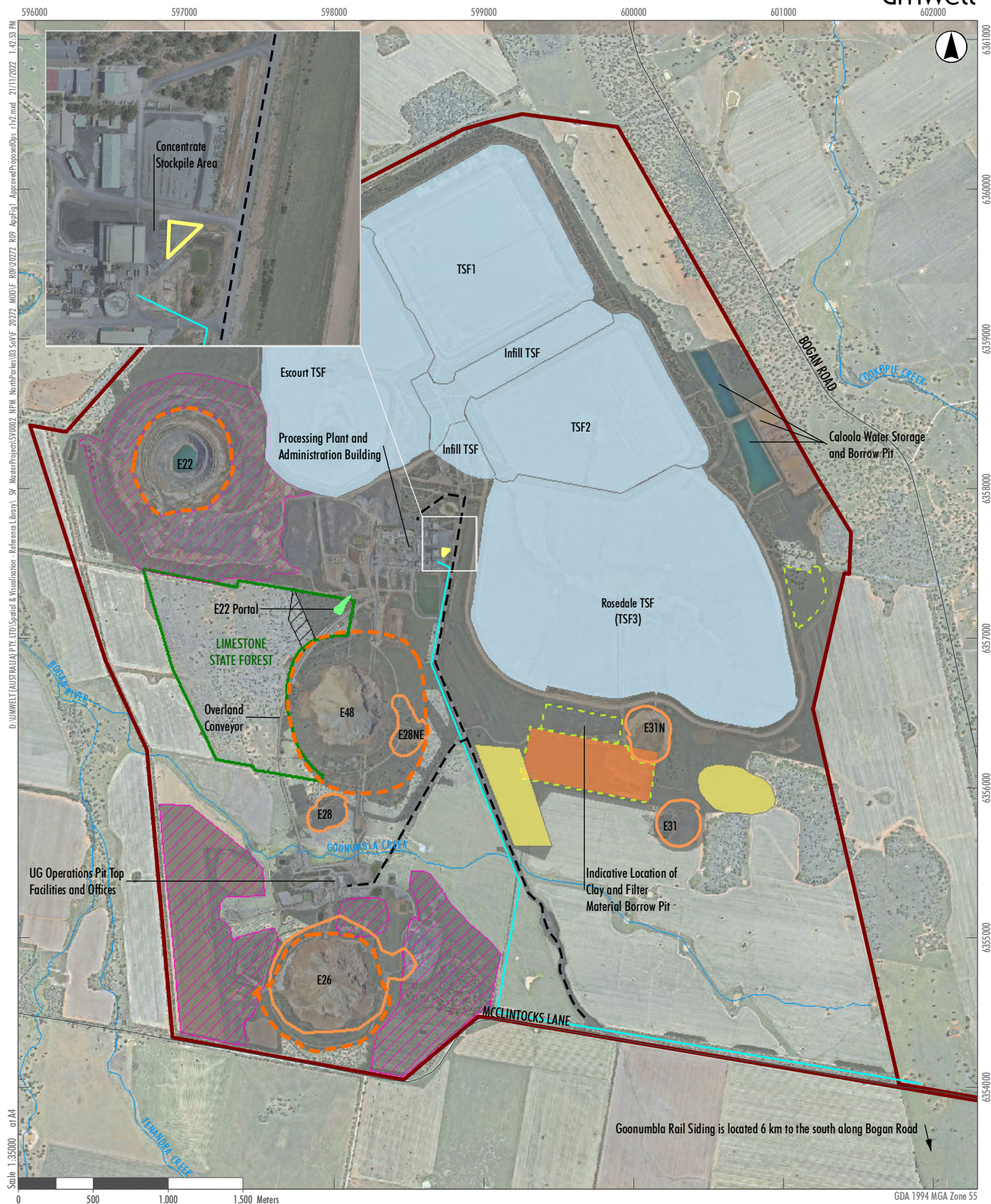
Table A1 Summary of Approved operations (as modified)

Aspect	Approved Operations (PA 11_0060)
Mine Life	Mining until end of 2032
Mining Areas	<ul style="list-style-type: none"> • Underground caving of the E22, E26 and E48 ore bodies. • Development of open cut mining area in existing mine subsidence zone for E26. • Development of four small open cuts to extract ore from E28, E28N, E31 and E31N.
Mining Methods	<ul style="list-style-type: none"> • Multiple Underground Block Caves and Sub Level Caves • Campaign Open cut mining of up to 7 Mtpa for stockpiling and processing as required.

Aspect	Approved Operations (PA 11_0060)
Mine Products	<ul style="list-style-type: none"> • Copper/gold concentrate
Blasting	<ul style="list-style-type: none"> • Surface blasting permitted between the hours of 9:00 am to 5:00 pm Monday to Saturday • Underground blasting permitted 24 hours per day, seven days per week
Open Cut Mining Depth	<ul style="list-style-type: none"> • E26 – approximately 300 m below ground level (mbgl) • E28/E28N – approximately 60 mbgl • E31 – approximately 110 mbgl • E31N – approximately 95 mbgl
Underground Mining Infrastructure	<ul style="list-style-type: none"> • Continued use of underground mining infrastructure, including ventilation and dewatering systems, power supply, maintenance workshops, underground refuelling station, underground offices, crib rooms and amenity facilities • Addition of new decline to E22 workings and associated portal
Ore Processing	<ul style="list-style-type: none"> • Processing up to 8.5 Mtpa of ore through the existing processing plant sourced from underground and open cut mining areas
Ore Handling and Processing Infrastructure	<ul style="list-style-type: none"> • Continued operation of existing ore processing plant including surface crusher, crushed ore stockpiles, active grinding mills, froth flotation area and concentrate storage • An overland conveyor to transport ore from the hoisting shaft to the ore processing plant stockpiles • Construction and operation of an additional ball mill • New secondary crushing building • Upgrades to ore conveyor, hoisting and processing infrastructure • New conveyor connecting E22 Portal with existing conveyor system
Tailings Management	<ul style="list-style-type: none"> • Approved TSFs comprise the Estcourt TSF, TSF 1, TSF2, Rosedale TSF (also known as TSF 3) and the Infill TSF (incorporating Infill TSF extension area) • Buttreassing works on TSF2 • Ongoing maintenance and lifts of TSFs Ancillary activities associated with TSF operation including pipelines to tailings delivery and water management (to be located within Approved Operational Areas)
Borrow Pits	<ul style="list-style-type: none"> • Caloola, Estcourt, Rosedale and E31 Precinct Borrow Pits (within approved Rosedale TSF footprint and immediately south of the Rosedale TSF) • Use of extractive and waste rock material generated by construction and augmentation of water management infrastructure for construction and maintenance of TSFs and water management infrastructure elsewhere on the site
Waste Rock Management	<ul style="list-style-type: none"> • Establishment of waste stockpiles to store waste rock material generated during open cut mining campaigns • Establishment of two temporary waste rock stockpiling areas (up to 30 m in height), to the west and east of the Rosedale Borrow Pit, within the E31 Precinct • Use of waste rock (including stockpiled material) for TSF construction and maintenance

Aspect	Approved Operations (PA 11_0060)
Water Management	<ul style="list-style-type: none"> • Operation, maintenance (and where appropriate, relocation) of water supply infrastructure • Continued supply and use of water via an extension of Parkes Shire Council's water pipeline via Main Water Supply Pipeline, including realignment to the west of the Access Road • Use of collected surface water runoff and recycled water from processing plant and TSFs • Continuation and extension of site water management system for operational purposes • Construction and maintenance of clean water diversion channels around the existing processing plant, site offices, TSFs and other operational areas, to ensure clean water is appropriately separated from operational water • New water management infrastructure associated with proposed E22 Portal (e.g. surge dams, dewatering sump etc)
Site Facilities	<ul style="list-style-type: none"> • Administration buildings and change rooms, core shed, laboratory, emergency response shed, warehouses, workshops, chemical and explosive storage areas, internal mine site roads and associated parking facilities • Block cave knowledge centre (including offices, class rooms, training workshops and additional car parking facilities) • Contractor area including carpark, offices, crib huts and a workshop, with flexibility to relocate Contractor Area within the existing Approved Operational Area (i.e. in the vicinity of the Processing Plant and Administration Buildings) to accommodate the extension to the Infill TSF
Services Infrastructure	<ul style="list-style-type: none"> • Continued operation (and where appropriate, relocation) of logistics connections including telecommunications, electricity and waste water • Operation of four wastewater treatment plants and associated waste disposal areas.
Site Access	<ul style="list-style-type: none"> • Provision of an upgraded site access road along a new alignment from McClintocks Lane (and closure of the previous site access road as primary mine site access point) and associated maintenance • Development of an access control and visitor's car parking on new Access Road • Upgrade/sealing and maintenance of McClintocks Lane between the NPM access road and Bogan Road • Upgrades as required to the intersection of McClintocks Lane and Bogan Road

Aspect	Approved Operations (PA 11_0060)
Product Transport	<ul style="list-style-type: none"> • Road haulage of concentrate to Goonumbla rail siding for transport via rail to port facilities • Permanent ability to transport up to 50 laden truck / month to the Parkes National Logistics Hub • Temporary road haulage of up to 32 truck movements per day to Parkes National Logistics Hub in circumstances when transport to Port via the Goonumbla Rail Siding is unavailable (subject to the approval of the Planning Secretary) • Temporary road haulage of up to 24 truck movements per day to alternative rail loading facilities for transport via rail to port facilities in the event of significant disruptions to rail networks (use of temporary arrangements for more than 30 days subject to the approval of the Planning Secretary)
Operating Hours	24 hours per day, seven days per week
No. Employees	Approximately 700 full time equivalents
Approved Operational Area	As shown in Figure 1
Rehabilitation and Final Landform	As shown conceptually in Figures 3 and 4
Biodiversity Offset Strategy	<ul style="list-style-type: none"> • Limestone National Forest Offset • Estcourt Tailings Storage Facility Offset • Kokoda Biodiversity Offset • Residual credit obligations under Modification 6 to met be using one or a combination of mechanisms available under the NSW Biodiversity Offsets Scheme.



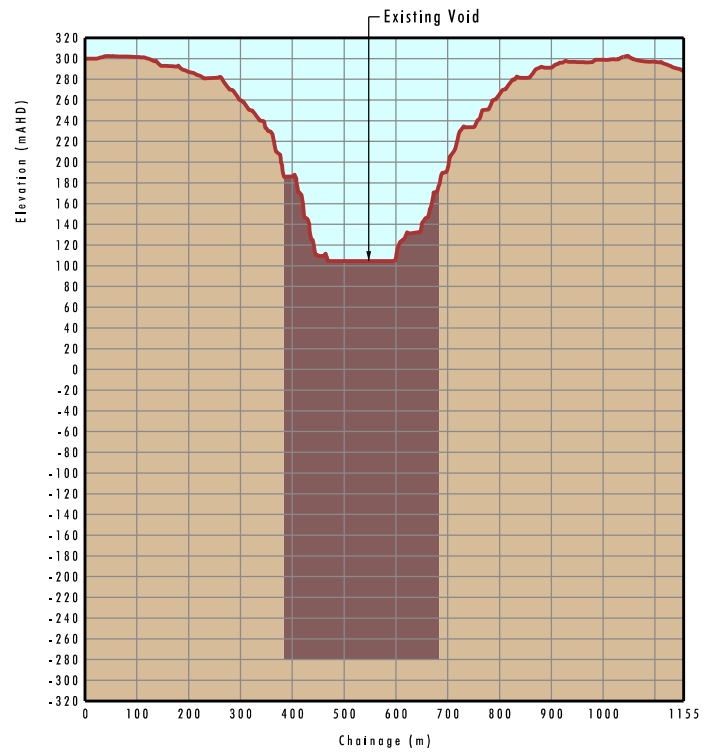
Legend

- Northparkes Project Area
- Temporary Waste Rock Stockpile
- E22 Portal
- E22 Portal Proposed Disturbance Area 2 (Stage 3)
- Concentrate Stockpile Extension Area
- Approved Open Cut Areas
- Approved Waste Dumps
- Subsidence Management Area
- Tailings Storage Facility
- Rosedale Borrow Pit and Waste Rock Stockpile Area
- Approved Operational Area
- Indicative Borrow Pits
- Internal Access Road
- Water Supply Pipeline
- Drainage Line
- Roads

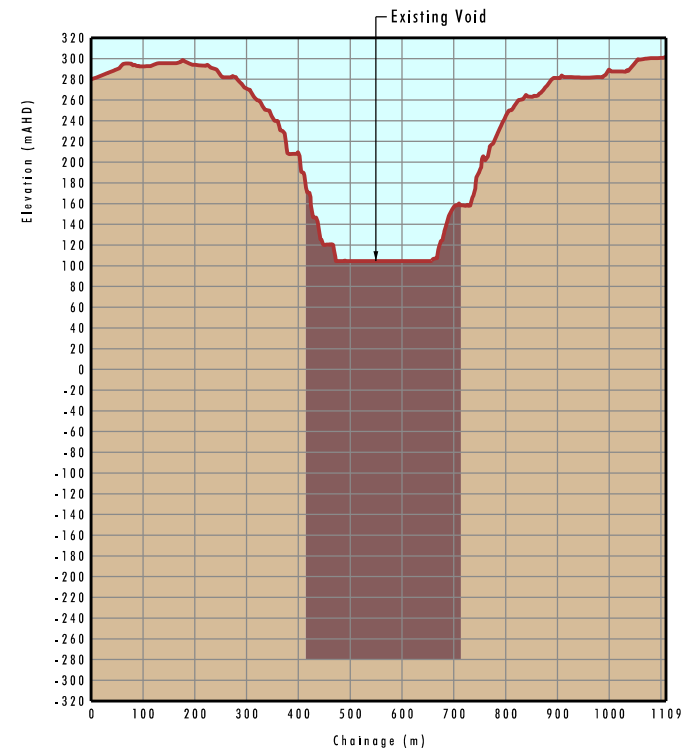
Image source: NPM (2020) Data source: NPM (2021)

FIGURE 1

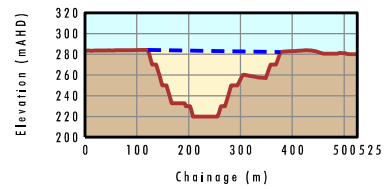
Approved and
Proposed Operations
(Incorporating MOD 8)



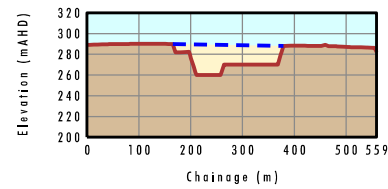
E22 East-West



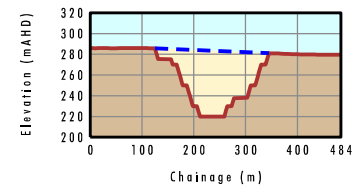
E22 North-South



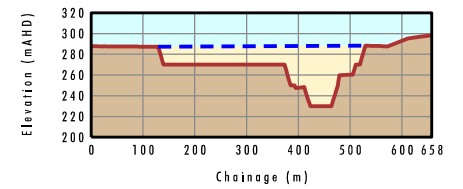
E28 East-West



E28NE East-West



E28 North-South



E28NE North-South

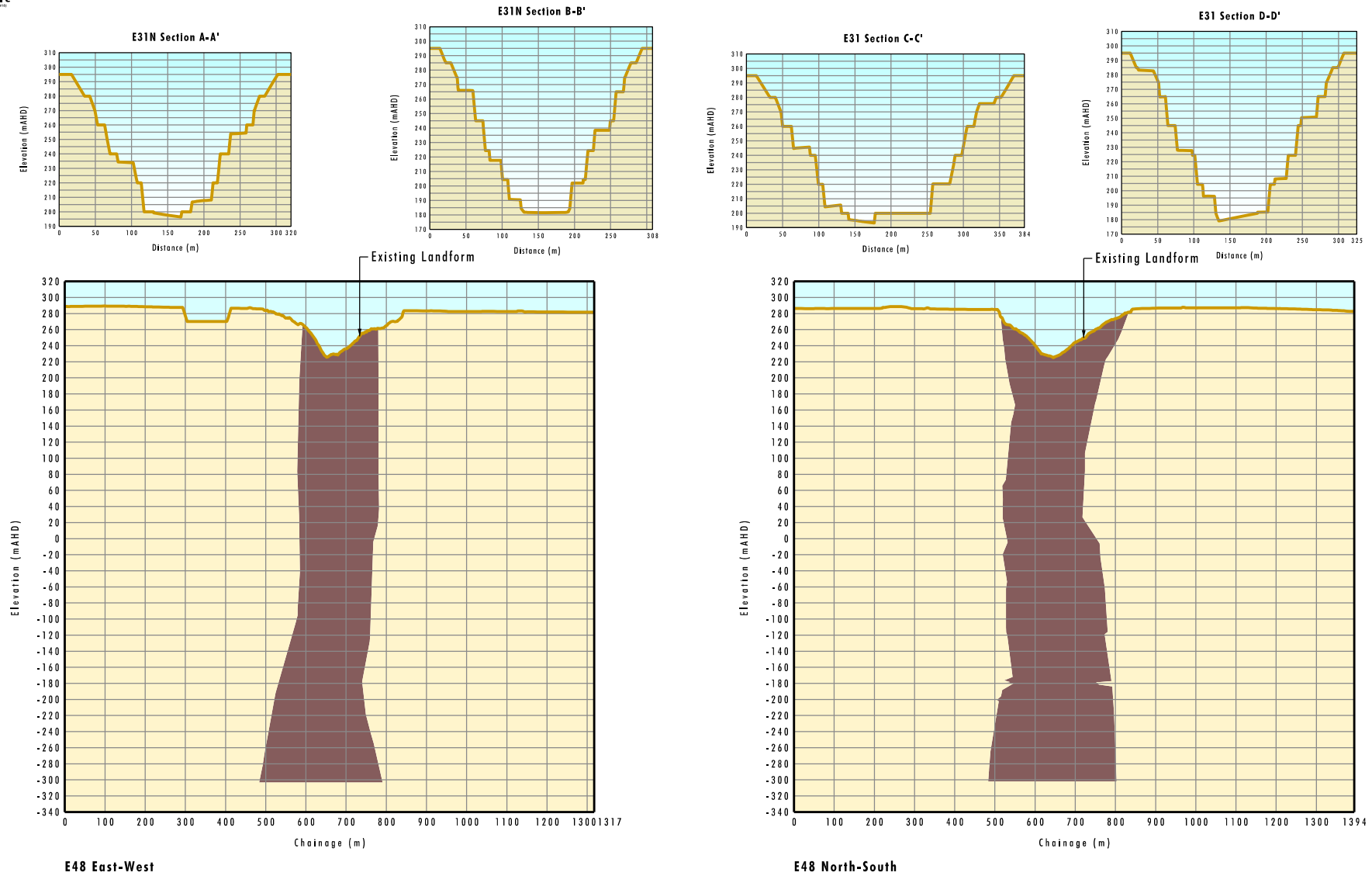
Legend

- Existing Surface Level
- Open Cut
- Underground Block Cave (Approximate Extent)
- Predicted Conceptual Open Cut Final Void

0 50 125 250m
Vertical Scale

0 100 250 500m
Horizontal Scale

FIGURE 2A
Conceptual Mine Plan Cross Sections



Legend

- Open Cut
- Underground Block Cave (Approximate Extent)
- Predicted Conceptual Open Cut Final Void

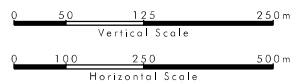
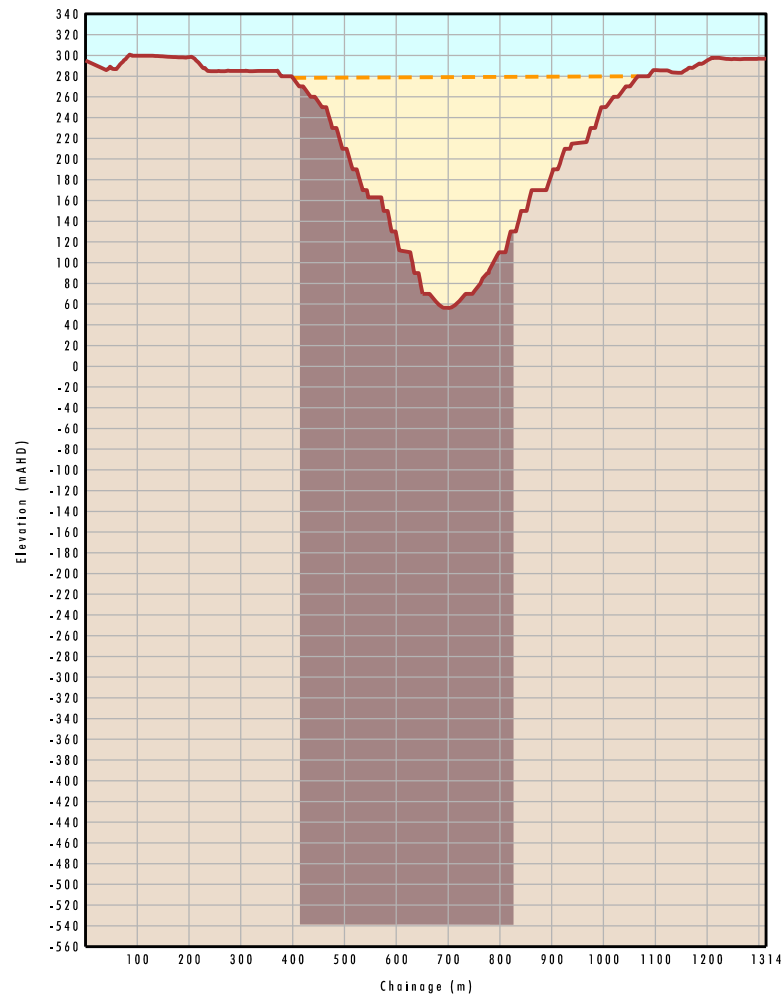
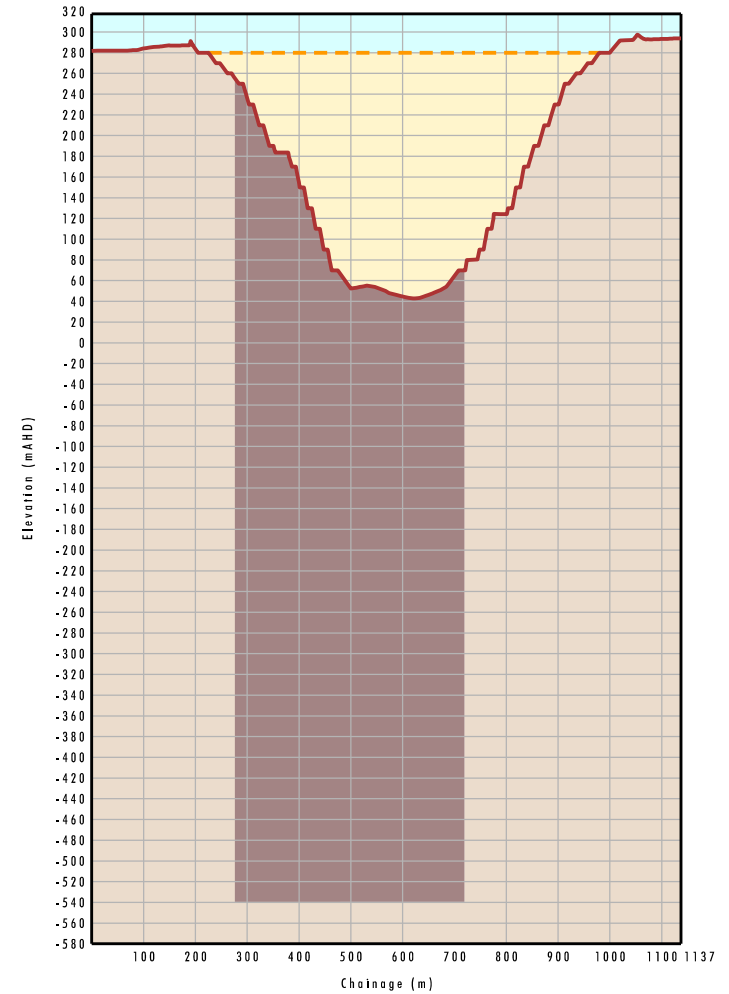


FIGURE 2B
Conceptual Mine Plan Cross Sections



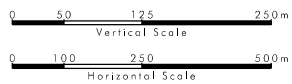
E26 East-West

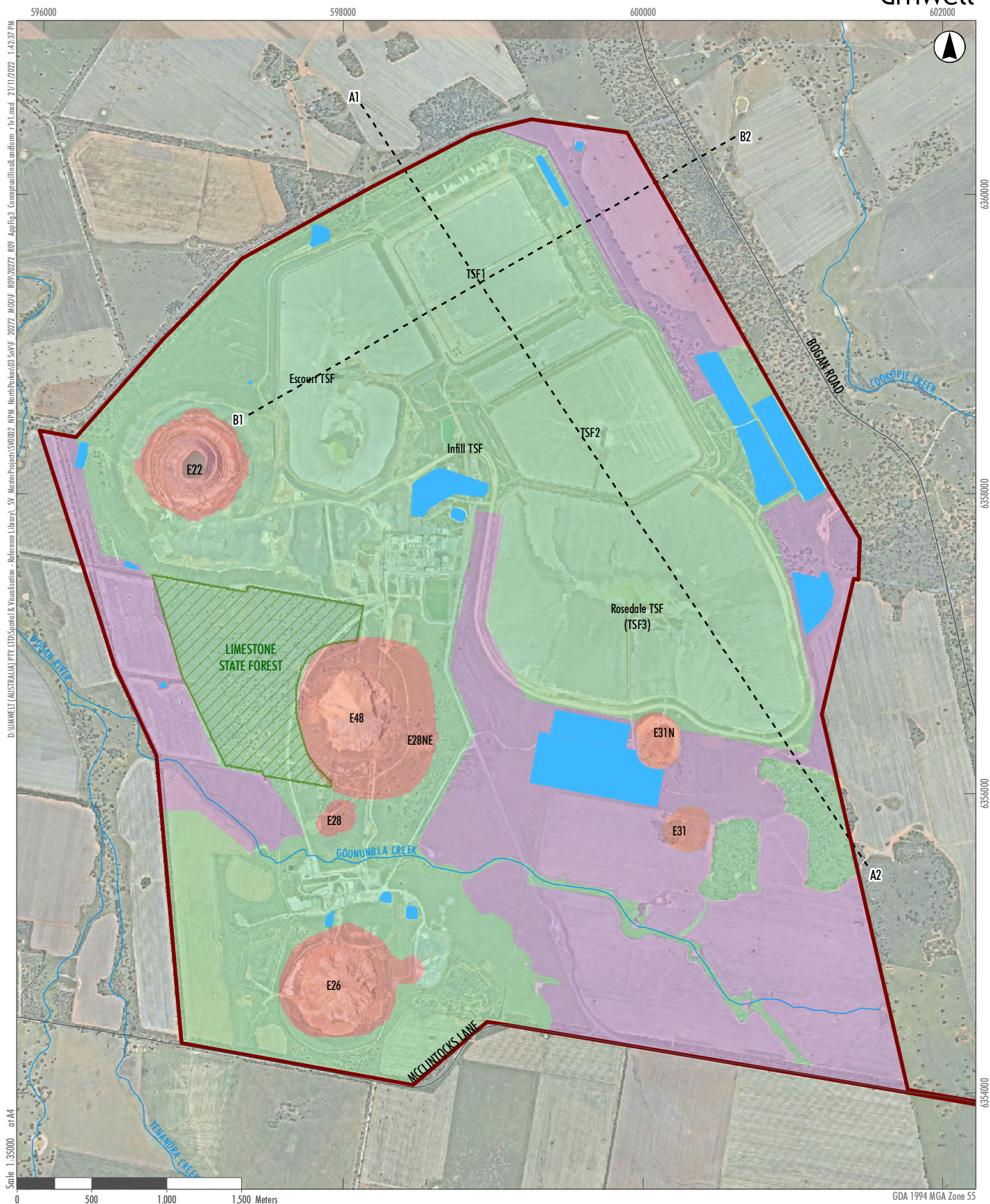


E26 North-South

Legend

- Open Cut
- Underground Block Cave (Approximate Extent)
- Predicted Conceptual Open Cut Final Void
- Original Surface Level



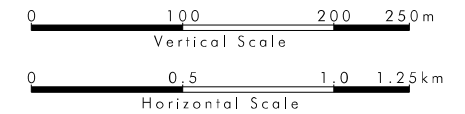
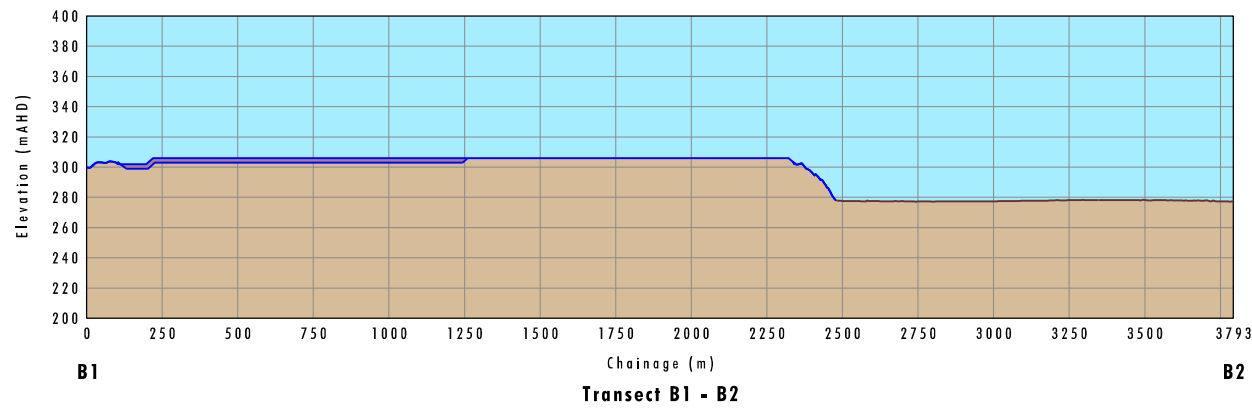
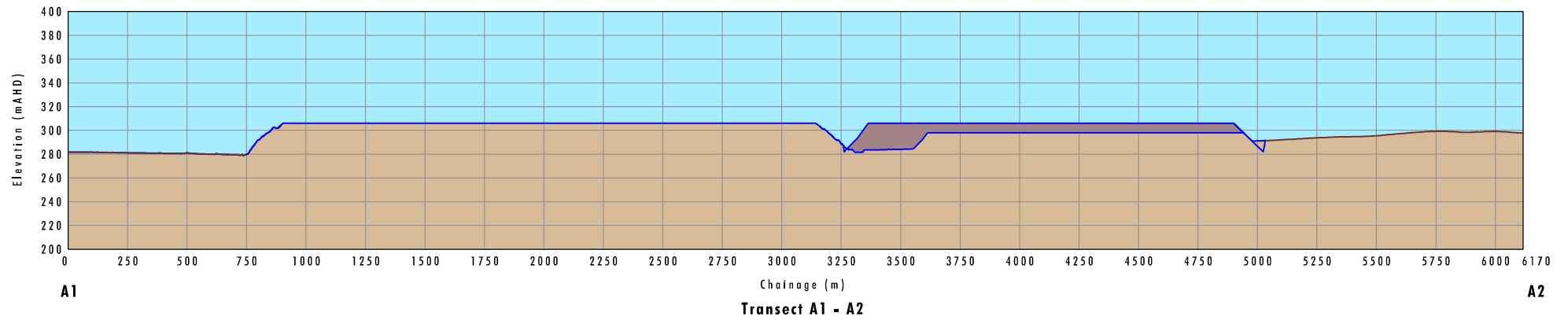


Legend

- Northparkes Project Area
- Water Storage Dam
- State Forest
- Drainage Line
- Roads
- Final Landform Cross Sections
- Agricultural Land Use
- Native Vegetation
- Restricted Land Use

FIGURE 3

Conceptual Final
Landform



Legend

- Approved Final Landform Cross Section
- Natural Ground Surface

FIGURE 4

Final Tailings Landform Cross Sections

A3 Relevant Documents

Table A2 List of Relevant Documents (PA 11_0060)

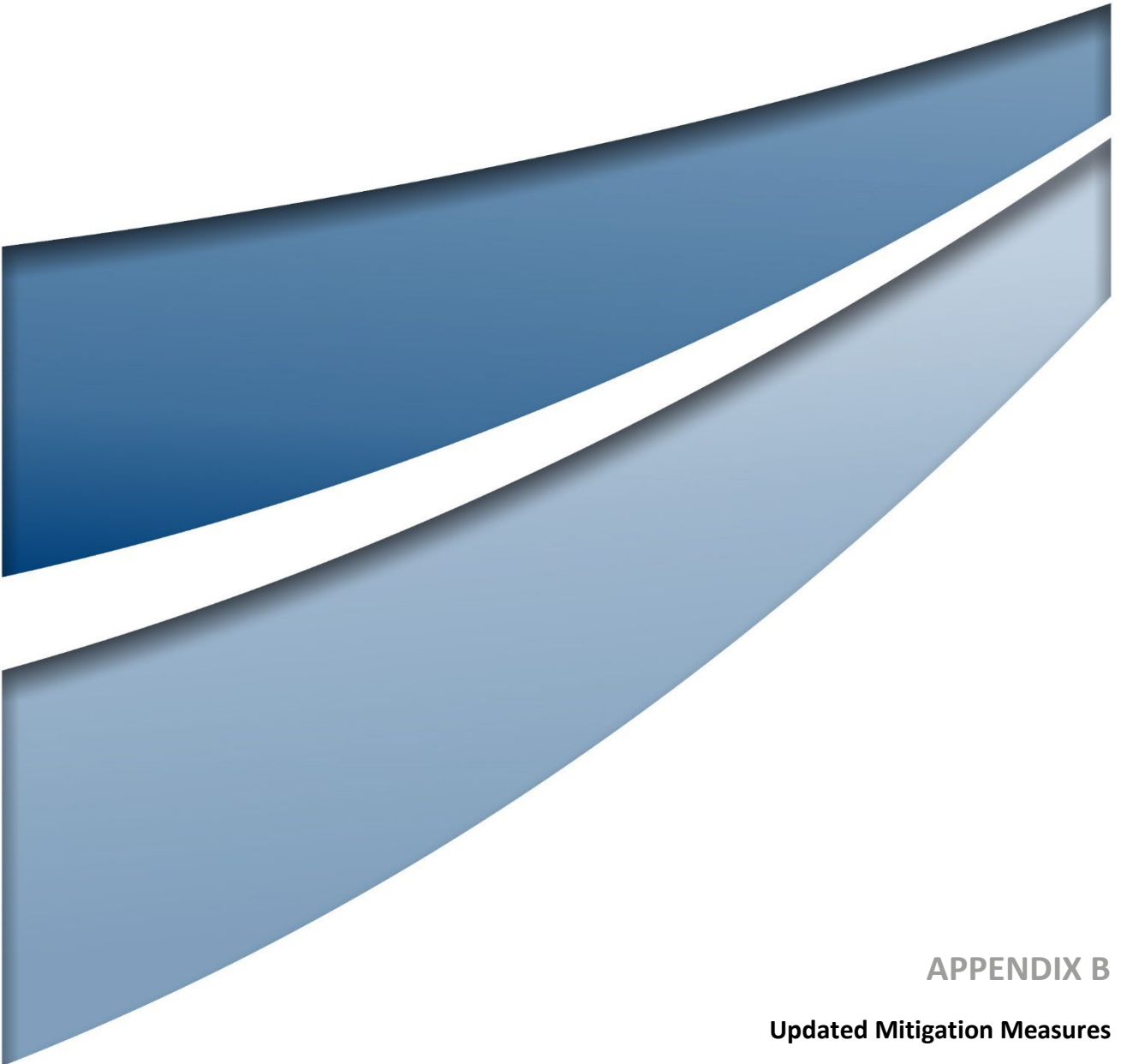
Document Reference	Document Title
Project Description and Environmental Assessments	
2013 EA	The Environmental Assessment titled <i>Northparkes Mines Step Change Project</i> (5 volumes), dated July 2013, the response to submissions dated September 2013 and the Addendum dated November 2013 ¹
MOD 1 EA	The Environmental Assessment titled <i>Northparkes Mines – Application for a 75W Modification</i> dated April 2015
MOD 2 EA	the Environmental Assessment titled <i>75W Modification to PA 11_0060 to reference unformed road land parcel in Appendix 1 of the Northparkes Mines Step Change Project Approval (PA 11_0060)</i> dated 11 March 2016
MOD 3 EA	The Environmental Assessment titled <i>Section 75W Modification to Project Approval 11_0060 – Northparkes Mines Proposed Changes to Mine Plans</i> dated 5 July 2017
MOD 4 EA	The Environmental Assessment titled <i>Environmental Assessment for Section 75W Modification to Project Approval 11_0060 – Northparkes Mines Proposed Changes to Ore Processing Infrastructure and Administrative Amendments</i> dated 19 July 2018
MOD 5 EA	The Environmental Assessment prepared by Umwelt titled <i>Northparkes Mines Statement of Environmental Effects Supporting an Application to Modify Project Approval 11_0060</i> dated June 2018
MOD 6 Mod Report	The Modification Report prepared by Umwelt titled <i>Northparkes Mines Modification 6 – E22 Portal, TSF2 Buttressing and E31 Precinct</i> dated November 2021
Mod 8 Mod Report	The Modification Report prepared by Umwelt titled <i>Northparkes Mines Modification8 Modified Concentrate Transport Arrangements</i> dated November 2022
Biodiversity Offset Strategies	
2013 EA	The Environmental Assessment titled <i>Northparkes Mines Step Change Project</i> (5 volumes), dated July 2013, the response to submissions dated September 2013 and the Addendum dated November 2013
E48 EA	The Environmental Assessment titled <i>Environmental Assessment Northparkes Mines – E48 Project, Volumes 1 – Parts 1 to 5, and Volume 2 – Parts 6 to 9</i> , prepared by RW Corkery & Co. Pty Ltd, dated August 2006
E48 MOD 1 BOS	Northparkes Mines Section 75W Modification Biodiversity Offset Strategy, prepared by GHD Pty Ltd, dated August 2009

¹Includes description of existing approved operations which were to continue under PA 11_0060.

A4 Relevant Land

Table A3 Schedule of Land (PA 11_0060)

Lot	DP		Relevant Mining Lease
46	753998	CMOC Mining Pty Ltd	ML1743
41	753998	CMOC Mining Pty Ltd	ML1247, ML1743
49	753998	CMOC Mining Pty Ltd	ML1743
10	1132130	CMOC Mining Pty Ltd	ML1743
100	1207194	CMOC Mining Pty Ltd	ML1367
12	753998	CMOC Mining Pty Ltd	ML1367
1	831622	CMOC Mining Pty Ltd	ML1247
2	830291	CMOC Mining Pty Ltd	ML1247, ML1743
3	830291	CMOC Mining Pty Ltd	ML1743
3	831119	CMOC Mining Pty Ltd	ML1247
1	830291	CMOC Mining Pty Ltd	ML1247
381	1108642	Crown Land	ML1247
382	1108642	CMOC Mining Pty Ltd	ML1641
42	1120299	The State of NSW	ML1247
43	1120299	CMOC Mining Pty Ltd	ML1247
41	1120299	CMOC Mining Pty Ltd	ML1247, ML1367
1	831119	CMOC Mining Pty Ltd	May be overlapped by ML1247
Between 3/830291 and 49/753998		Crown Land (CMOC Application to Purchase Reference #DPI W563265)	N/A
1	818783	CMOC Mining Pty Ltd	N/A (Goonumbla Rail Siding)
1	848944	State Rail Authority of NSW	N/A (Goonumbla Rail Siding)
1	952674	State Rail Authority of NSW	N/A (Goonumbla Rail Siding)
Bogan Road and McClintock Lane road reserves			N/A (road upgrade works)



APPENDIX B

Updated Mitigation Measures

Updated Project Description

Table B1 provides an updated summary of mitigation measures for PA 11_0060 as modified (incorporating MOD 6). It is intended that **Table B1** will replace the Statement of Commitments in Appendix 3 of PA 11_0060.

Table B1 Updated Mitigation Measures

Updated Mitigation Measures (PA 11_0060, as modified)	
Noise	
N1	<p>NPM will undertake additional targeted noise monitoring during construction periods for TSFs, whilst campaign open cut mining operations occur during winter night time operations. This targeted monitoring program will include the use of real time monitoring and be undertaken to identify situations when metrological conditions have the potential to exacerbate noise impacts on neighbouring receivers.</p> <p>Appropriate noise mitigation measures will be implemented as required.</p>
Traffic and Transport	
TT1	The proposed road upgrades, including the development of a new internal access road, upgrades to McClintocks Lane and its intersection with Bogan Road and the development of a new visitors car park, will each be designed in accordance with appropriate guidelines and standards and finalised in consultation with Parkes Shire Council and local landholders/neighbours as appropriate.
TT2	NPM will maintain current arrangements for financial contribution for the purpose of road maintenance as agreed with Parkes Shire Council in accordance with the executed Planning Agreement.
TT3	<p>NPM will prepare a detailed Construction Traffic Management Plan for the construction period of the Project, which will include details of:</p> <ul style="list-style-type: none"> any staging works construction routes heavy vehicles including oversize vehicles traffic management during the construction of the upgraded intersection in Bogan Road and McClintocks Lane.
TT4 (MOD 5 and 8)	<p>NPM will implement the following measures during temporary haulage arrangement to Parkes National Logistics Hub:</p> <ul style="list-style-type: none"> Truck movements will be limited as follows: <ul style="list-style-type: none"> No more than two A-Double vehicles used to transport the concentrate, with no more than four Northparkes generated truck movements past a receiver in any one hour No more than 32 truck movements in any 24 hour period, and no more than four movements per hour No truck movements between 10.00 pm and 7.00 am on Saturday and Sunday nights Unless otherwise approved by the Planning Secretary, truck movements to the Parkes National Logistics Hub will be limited to 50 laden truck movements per month) Adherence to the conditional restrictions on access to the Restricted Access Vehicle (RAV) routes on McClintocks Lane, Bogan Road and Brolgan Road Adherence to sign-posted and RAV route conditioned speed limits Preparation and implementation of a driver fatigue management policy and plan Preparation and implementation of a transport code of conduct.

Updated Mitigation Measures (PA 11_0060, as modified)	
TT5	<p>NPM will implement the following measures during haulage arrangements to the Parkes National Logistics Hub or locations other than Goonumbla rail siding:</p> <ul style="list-style-type: none"> Truck movements to PNLH and will be limited as follows: <ul style="list-style-type: none"> No more than four Northparkes generated truck movements past a receiver in any one hour No more than 32 truck movements per day and no more than four movements per hour associated with PNLH haulage no more than 24 truck movements per day to locations other than PNLH, No truck movements between 10.00 pm and 7.00 am on Saturday and Sunday nights NPM will notify the Planning Secretary prior to undertaking temporary haulage arrangements to rail loading facilities other than Goonumbla or the PNLH with the approval of the Secretary required for temporary haulage arrangement that extend beyond 30 days following any single disruption event. Adherence to the conditional restrictions on access to Restricted Access Vehicle (RAV) routes Adherence to sign-posted and RAV route conditioned speed limits Preparation and implementation of a driver fatigue management policy and plan Preparation and implementation of a driver code of conduct.
Aboriginal Cultural Heritage	
ACH1	NPM commits to a comprehensive survey of all portions of the proposed disturbance area that have not been subject to 100 per cent survey coverage prior to disturbance. Thus, any and all areas of the development footprint that will be affected will be examined prior to construction commencing, in consultation with the Aboriginal Heritage Working Group, and agreed management measures will be implemented.
ACH2	In the unlikely event that unexpected archaeological remains or potential heritage items not identified as part of this report are discovered during the Project, all works in the immediate area will cease. The remains and potential impacts will be assessed by a qualified archaeologist or heritage consultant and, if necessary, the Heritage Branch, BCD notified in accordance with Section 146 of the Heritage Act (NSW).
ACH3	If potential human remains are located following any surface disturbance, all works will halt in the immediate area to prevent any further impacts to the remains. The NSW Police will be contacted immediately. No action will be undertaken until police provide written notification to the Proponent.
MOD 6	<ul style="list-style-type: none"> The previously recorded modified tree (P1-Alectown, 35-6-0156) will be updated to 'not a site' on the AHIMS register. The tree will not be impacted until the approved Aboriginal Site Impact Recording Form (ASIRF) has been received. The Aboriginal Cultural Heritage Management Plan (ACHMP) will be consulted for the appropriate procedures if unanticipated Aboriginal objects or human skeletal remains are encountered during works

Updated Mitigation Measures (PA 11_0060, as modified)	
Socio-Economic	
SE1	<ul style="list-style-type: none"> NPM will continue investigating the sizing of contracts in order to facilitate the inclusion of local businesses within ongoing operations. NPM will consult with PSC in regard to other influences on accommodation demands when scheduling operations requiring short-term increases in employees and contractors. Should unanticipated impacts become evident during the life of the Project, NPM will liaise with PSC and/or the relevant government body in relation to how infrastructure challenges in the future may be met as a community. NPM will commence SIA, with regard to mine closure (including consultation with PSC, FSC, and the community), five years prior to the anticipated end of mine life, unless further extensions of mine life are being sought at that time. NPM will continue its existing community engagement and consultation program and will extend the program to facilitate feedback from the community with regard to community perceptions of NPM in order to proactively manage matters as they arise.
SE2 (MOD 5)	<p>NPM will implement the following measures during temporary haulage arrangement to Parkes National Logistics Terminal:</p> <ul style="list-style-type: none"> A-Double configuration vehicles to be used to limit the number of commutes Northparkes to periodically engage with landowners or residents adjoining the proposed transport route to monitor the impacts of traffic noise. Fatigue management of drivers to be enforced to ensure safety of employees, pedestrians and other road users. Promote and enforce safe driving practices. Drivers to travel the proposed route prior to commencement of concentrate haulage to familiarise themselves to changes in road signage, speed zones and high impact areas. Employees to report any road maintenance concerns to road managers to ensure continued condition of the proposed transport route. Implement a reporting procedure for any impact to private property including debris damage during commute along the proposed haul route. Continue to employ locally and invest in community sustainability projects. Continue to provide financial and other support to local groups and organisations.
Biodiversity	
B1	<p>NPM will implement the biodiversity management strategies outlined in Appendix 9 of the 2013 EA, including:</p> <ul style="list-style-type: none"> Feral animal and noxious weed control consistent with existing practices at the NPM Rehabilitation of disturbed areas to provide soil stabilisation and protection and possible future farming opportunities Adaptive management, as required, if a previously recorded or unassessed threatened species is identified in the proposed disturbance area during operations Ongoing monitoring and maintenance of any revegetation works and habitat enhancement activities Establishment of an ongoing monitoring program to monitor native flora and fauna across the Project Area.

Updated Mitigation Measures (PA 11_0060, as modified)

B2

Pre-Clearance Protocol

NPM will implement a tree felling procedure to minimise the potential for impacts on native fauna species (including threatened species) as a result of the clearing of hollow-bearing trees. The procedure will include:

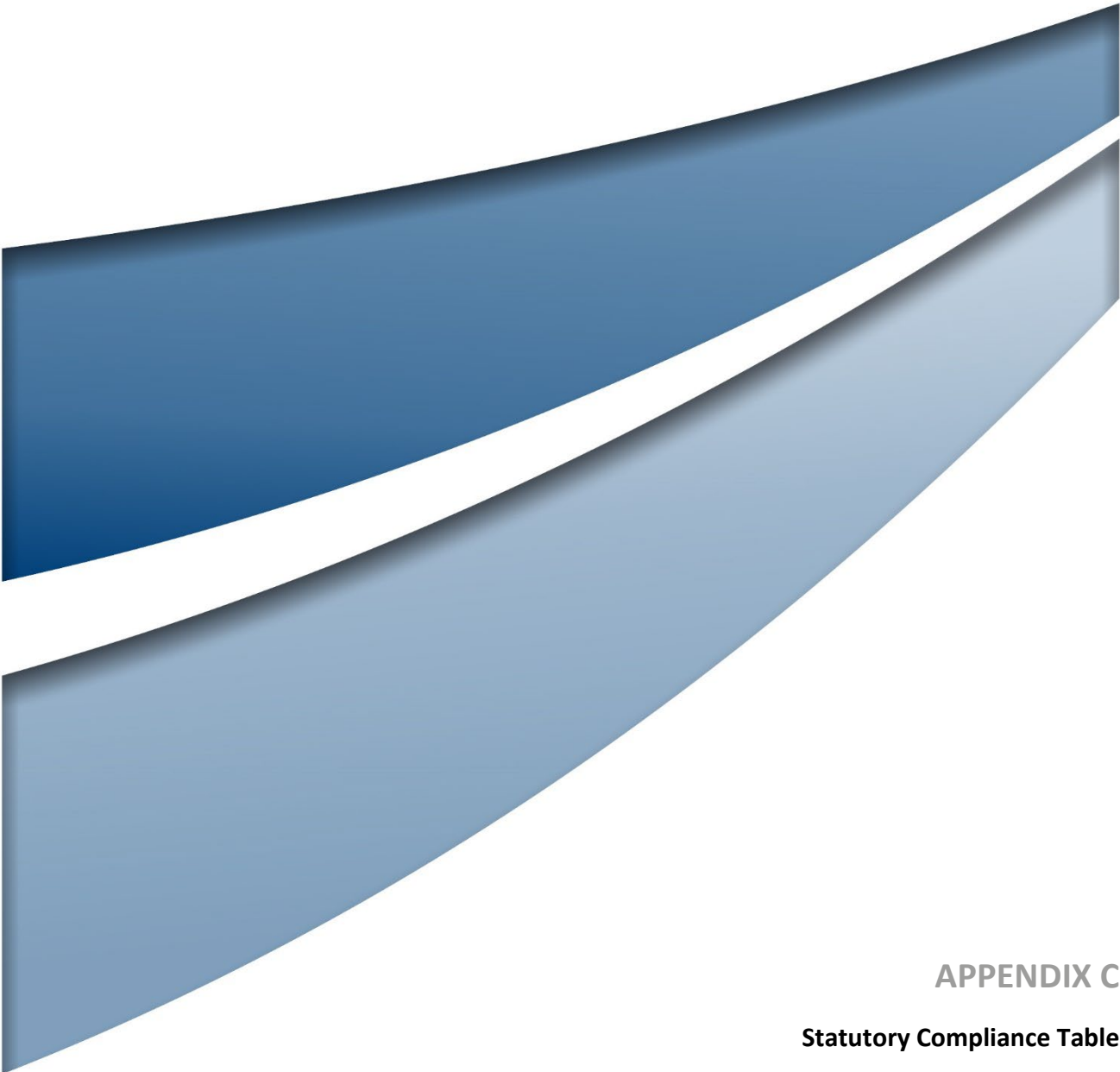
- comprehensive pre-clearing surveys by a suitably experienced and qualified ecologist, no more than two weeks prior to felling. This will include marking of hollow-bearing trees, as well as any other notable features such as fallen timber, hollow logs or boulders suitable for salvage; active nests, dreys or dens requiring consideration; and seed-bearing trees for salvage. Surveys will include detailed searches for threatened flora and fauna species, including micro-bats
- removal of non hollow-bearing trees/vegetation as close to the hollow-bearing tree felling date as possible (in order to discourage fauna usage of the area). It is not considered necessary for a suitably experienced and licensed ecologist to be present to supervise such works, providing pre-clearing surveys have been completed within the designated timeframe
- detailed hollow-bearing tree felling procedures, including (but not limited to):
 - supervision of all hollow-bearing tree felling works by a suitably experienced and licensed ecologist. If an ecological issue is encountered, the ecologist is to advise on the most appropriate measures to ensure minimal impact on fauna species, particularly threatened species
 - visual canopy inspection on the day of the felling of hollow-bearing trees for fauna species and active nests
 - shaking of hollow-bearing tree (with heavy machinery) for at least 30 seconds to encourage resident fauna to abandon tree, prior to felling
 - lowering of hollow-bearing trees as gently as possible with heavy machinery
 - inspection of all hollows in felled trees by a suitably experienced and licensed ecologist
 - capture of any displaced/injured fauna by a suitably experienced and licensed ecologist
 - release of unharmed fauna into nearby secure habitats by a suitably experienced and licensed ecologist
 - injured fauna to be assessed and taken to wildlife carer, if necessary, by a suitably experienced and licensed ecologist
 - felled trees to be rolled so that the number of hollows blocked against the ground are minimised
 - all felled trees to remain in place overnight to allow any unidentified fauna to escape
 - salvage of suitable hollows for treatment and installation within rehabilitation and revegetation areas as compensatory habitat, where practicable.

All personnel who will capture/handle/house and/or transport native fauna species (injured or uninjured) will be appropriately licensed under the requirements of the NSW Animal Ethics Committee.

Site personnel (particularly vehicle operators) will be briefed on fauna awareness issues and will be required to report incidents involving injury to native wildlife. Assistance from a wildlife carer or veterinarian will be sought if injured native wildlife are encountered.

Updated Mitigation Measures (PA 11_0060, as modified)	
B3	<p>Nest Boxes</p> <ul style="list-style-type: none"> To address the loss of hollows from clearing activities, the following will be undertaken: <ul style="list-style-type: none"> Augmentation of existing hollows within retained woodland remnants within the Project Area (see below). The amount of nest boxes to be used for this purpose will be developed based on further surveys of the proposed disturbance area during pre-clearing surveys. Staged mitigation of hollow loss from the proposed disturbance areas by placing nest boxes in surrounding vegetation. The type of nest box to be used will be dependent on the size of the hollows being removed and the type of species likely to be utilising the hollows. In general, the likely composition of nest box types will include a mix of bat roost boxes, parrot boxes, glider boxes, possum boxes and owl boxes. The number of nest boxes to be established will be dependent on the number of hollows to be removed and the existing provision of tree hollows in areas targeted for the addition of next boxes. Hollow-bearing tree surveys will be undertaken prior to clearing to determine the number of hollows to be impacted but given the abundance of hollows across the Wider Study Area, it is considered that hollow replacement should be undertaken at a ratio of one nest box (or suitable salvaged hollow) for every two natural hollows removed during felling.
B4	<p>Salvage of Habitat Features</p> <ul style="list-style-type: none"> The salvage and relocation of hollow logs, fallen timber and boulders will be undertaken wherever possible. Pre-clearance surveys will be used to clearly mark hollow-bearing trees. Hollow salvage operations will then be incorporated into the clearing phase (where appropriate) and will involve the careful removal of identified suitable hollows, hollow capping and any other restorative/protection works required. Hollows will be re-erected in trees in suitable positions within the non-impacted woodland areas within the Project Area. Salvaged and re-erected hollows will be subject to the same levels of maintenance and monitoring as nest boxes.

Updated Mitigation Measures (PA 11_0060, as modified)	
MOD 6	<p>NPM will implement the following mitigation measures during works associated with MOD 6:</p> <ul style="list-style-type: none"> • Ensure all workers are provided with an environmental induction prior to starting work on site. This would include information on the ecological values of the site and protection measures to be implemented to protect biodiversity. • Use of and regular inspection and maintenance of erosion and sediment control measures. • Fence off or mark trees and areas of native vegetation to be retained, to avoid additional impacts on vegetation. Fencing should protect the entire Tree Protection Zone (a general 5 m buffer zone will be applied, which is sufficient for the tree sizes present) • Establish appropriate buffers around trees that are to be retained. Work would avoid damage to the structural root zones (SRZ) of the trees • Restrict stockpiles of construction materials, fill or vegetation to existing cleared areas and not within areas of adjoining native vegetation • Applying water to stockpile areas during windy conditions • Construction traffic would remain on existing roads and tracks and avoid areas of native vegetation where practicable. • Reinstatement of unstable surfaces as quickly as practicable after construction for those areas not to be directly used for proposal infrastructure. <p>Residual biodiversity impacts associated with MOD 6 will be offset in accordance with the <i>NSW Biodiversity Offsets Scheme</i> and the <i>Biodiversity Conservation Act 2016</i>.</p>
Visual	
V1	<ul style="list-style-type: none"> • NPM will implement the following mitigation measures to mitigate potential visual impacts from the Project: <ul style="list-style-type: none"> ○ Maintenance of existing vegetation where possible for visual screening, including infill planting where necessary; ○ Additional screen plantings will be utilised in strategically located positions to augment existing plantings and limit views into the Project from public roads, in particular McClintock's Lane; ○ Continued establishment of revegetation corridors outside the active mine area through ongoing land management practices; ○ Ensuring that areas of disturbance are kept to the minimum practicable at any one point in time; ○ Rehabilitation of disturbed areas in undertaken as soon as practical; and ○ Aiming to minimise night lighting impacts on surrounding land owners and road users by ensuring, where practicable, that lighting plants are positioned such that light is directed toward work areas and not towards private residences and roads.



APPENDIX C

Statutory Compliance Table

Table C1 Relevant State Legislation

Act	Comment	Further Approval Required?
Approvals Which Do Not Apply (Section 4.41)		
Fisheries Management Act 1994	A permit under section 201 (dredging or reclamation work), s. 205 (harming marine vegetation) or s. 219 (blocking of fish passage).	No
Heritage Act 1977	An approval under Part 4 (effect on interim heritage orders and listing on State Heritage Register), or an excavation permit under section 139 (disturbance or excavation of relic) and Division 8 Part 6 of the Act.	
National Parks and Wildlife Act 1974	The <i>National Parks and Wildlife Act 1974</i> (NP&W Act) aims to manage and conserve nature, objects, places and features that have ecological and cultural value. The NP&W Act is administered and enforced by the OEH. Aboriginal places and objects are protected under the NP&W Act. An Aboriginal Heritage Impact Permit (AHIP) is required for consent to destroy, deface or damage Aboriginal object or Aboriginal place.	
Rural Fires Act 1997	A bushfire safety authority under section 100B (bushfire safety authority).	
Water Management Act 2000	A water use approval under section 89; a water management work approval under section 90; an activity approval (other than an aquifer interference approval) under section 91.	
Approvals Legislation to be Applied Consistently with Development Consent (Section 4.42)		
Mine Subsidence Compensation Act 1961 (MSC Act)	An approval under section 15 from the NSW Mine Subsidence Board (MSB) for development within a mine subsidence district.	No
Fisheries Management Act 1994	An aquaculture permit under section 144. An aquaculture permit will not be required for the Proposed Modification.	No
Mining Act 1992 (Mining Act)	All works associated with the Proposed Modification will be located within existing mining lease boundaries. The Mining Act requires all mining operations and ancillary mining activities be subject to a Rehabilitation Management Plan approved by the NSW Resources Regulator. The RMP will be updated to reflect the proposed extension to the Concentrate Stockpile Area	No new approval required. RMP to be updated as required.
Protection of the Environment Operations Act 1997 (POEO Act)	The POEO Act regulates pollution to the environment and requires licences for environmental protection including waste, air, water and noise pollution control. Minerals mining is a scheduled activity which must be licensed under the POEO Act. The Proposed Modification will not require a variation to the site’s existing EPL.	No

Act	Comment	Further Approval Required?
Other State Legislation Relevant to the Proposed Modification		
Biodiversity Conservation Act 2016 (BC Act)	<p>The BC Act was implemented on 25 August 2017. The introduction of this legislation subsequently repealed the <i>Threatened Species Conservation Act 1995</i> (TSC Act).</p> <p>The Project will not have any additional biodiversity impacts relative to approved operations.</p>	No
Water Management Act 2000 (WM Act)	The Proposed Modification will not require approval under sections 89, 90 or 91 (other than an aquifer interference approval) of the WM Act due to the exemptions outlined under Section 4.41 of the EP&A Act.	No
Roads Act 1993	<p>The <i>Roads Act 1993</i> (Roads Act) applies to public roads in NSW, and depending upon the type of road, is administered by Transport for NSW or the local council.</p> <p>The Proposed Modification does not require approval under Section 138 of the Roads Act as it does not involve works or structures that disturb the surface of a public road or connect a road to a classified road.</p>	No

Table C2 Pre-conditions

Statutory Reference	Pre-condition	Relevance
State Environmental Planning Policy (Resources and Energy) 2021 – Chapter 2 Mining, Petroleum Production and Extractive Industries	Part 2.3 of the Resources and Energy SEPP requires specific matters to be considered in relation to development applications for mining developments.	Specific matters are described in Table C2
	Section 2.16 of the Resources and Energy SEPP identifies non-discretionary development standards for mining and provides that the consent authority cannot impose more onerous standards in any approval in relation to the matters covered by the development standard.	The prescribed standards are summarised in Table C2
	Part 4A of the Resources and Energy SEPP provides for the implementation of the Strategic Regional Land Use Plans (SRLUPs). The 'gateway process' applies to proposed mining development located on Biophysical Strategic Agricultural Land (BSAL) and Critical Industry Cluster Land (CIC land) outside of existing mining lease areas. A process that triggers the gateway process must obtain a Gateway Certificate.	All aspects of the Project that require a mining lease are covered by existing mining leases, and therefore the Gateway Process is not applicable to the Project.

Statutory Reference	Pre-condition	Relevance
State Environmental Planning Policy (Biodiversity and Conservation) 2021 – Chapter 3 and Chapter 4 Koala Habitat Protection	A consent authority is restricted from granting development consent for proposals on land identified as core koala habitat without the preparation of a plan of management.	The Biodiversity and Conservation SEPP applies to the extent that the Project Area is located within LGAs to which the SEPP applies. However, no additional surface disturbance is proposed. The Project will therefore not have any impact on koala habitat.
State Environmental Planning Policy (Resilience and Hazards) 2021 – Chapter 2 Coastal Management	Not Applicable – Not Located within Coastal zone.	N/A
State Environmental Planning Policy (Resilience and Hazards) 2021 – Chapter 3 Hazardous and Offensive Development	Chapter 3 of the Resilience and Hazards SEPP requires a consent authority to consider whether an industrial development is a potentially hazardous or potentially offensive industry. A hazard assessment is completed for potentially hazardous developments to assist the consent authority to determine acceptability.	The Project will not alter existing storage and/or use of dangerous goods or hazardous materials and will not increase emissions to the surrounding environment and therefore does not constitute a hazardous or offensive development. Accordingly, a preliminary hazard analysis is not required.
State Environmental Planning Policy (Resilience and Hazards) 2021– Chapter 4 Remediation of Land	Under Chapter 4 of the Resilience and Hazards SEPP, a consent authority must not consent to the carrying out of development on land unless it has considered any potential contamination issues.	No additional surface disturbance is proposed as part of the Project. Mine closure and rehabilitation will be undertaken in accordance with relevant consent conditions consistent with existing approved operations.
State Environmental Planning Policy (Transport and Infrastructure) 2021 – Chapter 2 Infrastructure	No Applicable	Not Applicable

Table C3 Application of Resources and Energy SEPP 2021

Clause	Description	Comment
12AB: Nondiscretionary development standards for mining	(1) The object of this clause is to identify development standards on particular matters relating to mining that, if complied with, prevents the consent authority from requiring more onerous standards for those matters (but that does not prevent the consent authority granting consent even though any such standard is not complied with).	Noted.
	(2) The matters set out in this clause are identified as non-discretionary development standards for the purposes of section 79C (2) and (3) of the Act in relation to the carrying out of development for the purposes of mining.	Noted.
	(3) Cumulative noise level	Complies

Clause	Description	Comment
	The development does not result in a cumulative amenity noise level greater than the acceptable noise levels, as determined in accordance with Table 2.1 of the Industrial Noise Policy, for residences that are private dwellings.	
	(4) Cumulative air quality level The development does not result in a cumulative annual average level greater than 30 µg/m ³ of PM ₁₀ for private dwellings.	Complies
	(5) Airblast overpressure Airblast overpressure caused by the development does not exceed— (a) 120 dB (Lin Peak) at any time, and (b) 115 dB (Lin Peak) for more than 5% of the total number of blasts over any period of 12 months, measured at any private dwelling or sensitive receiver. (6) Ground vibration Ground vibration caused by the development does not exceed— (a) 10 mm/sec (peak particle velocity) at any time, and (b) 5 mm/sec (peak particle velocity) for more than 5% of the total number of blasts over any period of 12 months, measured at any private dwelling or sensitive receiver.	Complies
	(7) Aquifer interference Any interference with an aquifer caused by the development does not exceed the respective water table, water pressure and water quality requirements specified for item 1 in columns 2, 3 and 4 of Table 1 of the Aquifer Interference Policy for each relevant water source listed in column 1 of that Table	Complies
	(8) The Minister is to review a non-discretionary development standard under this clause if a government policy on which the standard is based is changed.	Noted.
12: Compatibility with other land uses	<p>Consideration is given to:</p> <ul style="list-style-type: none"> the existing uses and approved uses of land in the vicinity of the development the potential impact on the preferred land uses (as considered by the consent authority) in the vicinity of the development any ways in which the development may be incompatible with any of those existing, approved or preferred land uses. <p>The respective public benefits of the development and the existing, approved or preferred land uses are evaluated and compared</p> <p>Measures proposed to avoid or minimise any incompatibility are considered.</p>	<p>The Proposed Modification will not increase the environmental or amenity impacts of approved operations on existing and approved land uses in the vicinity of the site. These impacts will continue to be managed using established mitigation and monitoring strategies (see Appendix B).</p> <p>Road haulage arrangements are consistent with operations approved under Modification 5 and the use of public roads for haulage will be subject to</p>

Clause	Description	Comment
		relevant heavy vehicle restrictions.

Clause	Description	Comment
16: Transportation	<p>The following transport-related issues are considered:</p> <ul style="list-style-type: none"> the transport of some or all of the materials from the site by means other than public road. limitation of the number of truck movements that occur on roads within residential areas or roads near to schools. the preparation of a code of conduct for the transportation of materials on public roads. 	<p>The Proposed Modification seeks approval for road haulage to mitigate impacts associated with rail haulage disruptions.</p> <p>All road haulage is undertaken in accordance with a Drivers Code of Conduct.</p> <p>Rail haulage via the Goonumbla rail siding remains the preferred haulage option when available.</p>
17: Rehabilitation	<p>The rehabilitation of the land affected by the development is considered including:</p> <ul style="list-style-type: none"> the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated the appropriate management of development generated waste remediation of any soil contaminated by the development the steps to be taken to ensure that the state of the land does not jeopardize public safety, while being rehabilitated or at the completion of rehabilitation. 	<p>The Proposed Modification does not materially affect rehabilitation of the mine site.</p>

Table C4 Section 1.3 Objects of the EP&A Act

Object	Consideration	Mod Report Reference
To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	<p>Section 4.0 and Section 5.0 consider the potential impacts of the Project.</p> <p>The Proposed Modification is not predicted to have any significant impacts on social or environmental matters.</p> <p>The Proposed Modification will mitigate potentially adverse socio-economic impacts associated with rail logistics disruptions.</p>	Section 4.0 and 5.0
To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	<p>The Modification Report provides the consent authority with a comprehensive assessment of the positive and negative social, economic and environmental impacts associated with the Project.</p> <p>The Proposed Modification is considered to be consistent with the principles of ecologically sustainable development.</p>	Sections 4.0 and 5.0
To promote the orderly and economic use and development of land,	<p>The overall merits of the Project are considered in the Modification Report.</p>	Sections 1.0, 2.0, 4.0 and 5.0

Object	Consideration	Mod Report Reference
To promote the delivery and maintenance of affordable housing,	Not directly relevant to the Proposed Modification.	N/A
To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The Proposed Modification will not have any additional impacts on biodiversity values relative to approved operations.	Section 4.0
To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The Proposed Modification will not have any additional impacts on heritage values relative to approved operations.	Sections 4.0
To promote good design and amenity of the built environment,	The Proposed Modification does not involve any changes to built environment outside the immediate area of the existing infrastructure area. The proposed extension to the existing stockpile area will not be visible from publicly accessible areas and is consistent with existing development at Northparkes.	Sections 4.0
To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The Project does not involve the construction of any additional buildings.	N/A
To promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	Relevant Government agencies have been consulted during the assessment and post approval processes for Modification 5. Agencies have been consulted on the proposed modification.	Sections 3.0
To provide increased opportunity for community participation in environmental planning and assessment.	The proposed haulage arrangements to the PNTH were subject to the Modification 5 public exhibition processes and no submissions were received from members of the public.	Section 4.0