

TRITTON RESOURCES PTY LTD

ABN 88 100 095 494

Rehabilitation Management Plan

for the

Tritton Copper Mine









August 2023

ACKNOWLEDGEMENT

R.W. Corkery & Co. acknowledge and pay our respects to the Traditional Custodians of the lands in NSW and Australia on which our projects are located. We value the knowledge, advice and involvement of the Elders and extended Aboriginal community that contribute to our Projects and extend our respect to all Aboriginal and Torres Strait Islander peoples.



Rehabilitation Management Plan

for the

Tritton Copper Mine

Prepared for:

Tritton Resources Pty Ltd ABN: 88 100 095 494

Telephone: (02) 6838 1100 Email: info@aerisresources.com.au

Prepared by:

R.W. Corkery & Co. Pty. Limited Geological & Environmental Consultants ABN: 31 002 033 712

Telephone: (02) 9985 8511 Email: admin@rwcorkery.com Postal: PO Box 1796 CHATSWOOD NSW 2057

Ref No. 440/20

Sydney | Orange | Townsville

Sydney Suite 12.01, 1-5 Railway Street CHATSWOOD NSW 2067

Orange 62 Hill Street ORANGE NSW 2800

Yarrandale Road

HERMIDALE NSW 2831

August 2023



Summary Table

Name of Mine		Tritton Copper Mine			
RMP Commencement Date		2 August 2022			
Mineral Authorities		ML1544	Expiry Date	21 December 2028	
Name of Leaseholder		Tritton Resources Pty Ltd			
Version Author		Purpose	Approved by	Date of Submission	
1	RWC (M. Fake)	Draft Issued to Resources Regulator for Reference	Q. Brewer (Aeris)	15/06/2023	
2 RWC (M. Fake)		Final draft for website	M. Fake (RWC)	04/8/2023	

This Copyright is included for the protection of this document

COPYRIGHT

© R.W. Corkery & Co. Pty Limited 2023

and

© Tritton Resources Pty Ltd 2023

All intellectual property and copyright reserved.

Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright Act, 1968, no part of this report may be reproduced, transmitted, stored in a retrieval system or adapted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without written permission. Enquiries should be addressed to R.W. Corkery & Co. Pty Limited.



CONTENTS

		Page
LIST	OF ACRONYMS	VI
1.	INTRODUCTION TO MINING PROJECT	1
1.1	HISTORY OF OPERATIONS	4
	1.1.1 Mining Activities	
	1.1.2 Rehabilitation	
1.2	CURRENT DEVELOPMENT CONSENTS, LEASES AND LICENCES	
1.3	LAND OWNERSHIP AND LAND USE	
	1.3.1 Land Ownership and Land Use Figures	10
2.	FINAL LAND USE	13
2.1	REGULATORY REQUIREMENTS FOR REHABILITATION	13
2.2	FINAL LAND USE OPTIONS ASSESSMENT	13
2.3	FINAL LAND USE STATEMENT	
2.4	FINAL LAND USE AND MINING DOMAINS	
	2.4.1 Final Land Use Domains	
	2.4.2 Mining Domains	27
3.	REHABILITATION RISK ASSESSMENT	29
4.	REHABILITATION OBJECTIVES AND REHABILITATION COMPLETION CRITERIA	43
4.1	REHABILITATION OBJECTIVES AND REHABILITATION COMPLETION CRITERIA	43
4.2	REHABILITATION OBJECTIVES AND REHABILITATION COMPLETION CRITERIA – STAKEHOLDER CONSULTATION	43
5.	FINAL LANDFORM AND REHABILITATION PLAN	55
5.1	FINAL LANDFORM AND REHABILITATION PLAN	55
6.	REHABILITATION IMPLEMENTATION	58
6.1	LIFE OF MINE REHABILITATION SCHEDULE	58
6.2	PHASES OF REHABILITATION AND GENERAL METHODOLOGIES	61
	6.2.1 Active Mining	
	6.2.2 Decommissioning	
	6.2.3 Landform Establishment6.2.4 Growth Medium Development	
	6.2.5 Ecosystem and Land Use Establishment	
	6.2.6 Ecosystem and Land Use Development	
6.3	REHABILITATION OF AREAS AFFECTED BY SUBSIDENCE	97
7.	REHABILITATION QUALITY ASSURANCE PROCESS	98
8.	REHABILITATION MONITORING PROGRAM	100
8.1	ANALOGUE SITE BASELINE MONITORING	100
8.2	REHABILITATION ESTABLISHMENT MONITORING	102



CONTENTS

_			
-	-	-	-
-	-	а	

		i uge
8.3	MEASURING PERFORMANCE AGAINST REHABILITATION OBJECTIVES AND REHABILITATION COMPLETION CRITERIA	105
9.	REHABILITATION RESEARCH AND TRIALS	106
9.1	CURRENT REHABILITATION RESEARCH AND TRIALS	106
	9.1.1 Minor Rehabilitation Trials	
9.2	FUTURE REHABILITATION RESEARCH AND TRIALS	
	9.2.1 Seed Balance and Procurement Strategy	107
	9.2.2 Post-Closure Water Management Strategy	
	9.2.3 Land Contamination and Hazard Assessment	
	9.2.4 Tailings Storage Facility Capping Detailed Design	108
	9.2.5 Landform Modelling	109
10.	INTERVENTION AND ADAPTIVE MANAGEMENT	110
10.1	THREATS TO REHABILITATION	110
10.2	TRIGGER ACTION RESPONSE PLAN	110
11.	REVIEW AND IMPLEMENTATION	116
12.	REFERENCES	118

APPENDICES

Appendix 1 Rehabilitation Control Checklist

FIGURES

Figure 1	Locality Plan and Mineral Authorities	2
Figure 2	Existing Mine Site Layout	3
Figure 3	Land Ownership and Residences	8
Figure 4	Surrounding Land Uses	9
Figure 5	Vegetation Communities	11
Figure 6	Land Zoning	12
Figure 7	Final Land Use Domains	26
Figure 8	Mining Domains	28
Figure 9	Rehabilitation Monitoring Sites	. 101

TABLES

Table 1	Consents, Leases and Licenses	. 5
Table 2	Land Ownership	. 7
Table 3	Regulatory Requirements for Rehabilitation	14
Table 4	Final Land Use Domains	25



CONTENTS

Page Table 5 Table 6 Table 7 Table 8 Table 9 Table 10 Table 11 Table 12 Proposed Rehabilitation Objectives and Proposed Rehabilitation Completion Criteria 45 Table 13 Non-Production Waste Management......70 Tailings Characterisation Test Results74 Table 14 Table 15 Table 16 Table 17 Table 18 Table 19 Table 20 Table 21 Table 22 Trigger Action Response Plan 111

PLANS

Table 23

Plan 1	Final Landform Features	56
Plan 2	Final Landform Contours	57
Plan 3	Progressive Rehabilitation Schedule: 2022 – 2025	59
Plan 4	Progressive Rehabilitation Schedule: 2027 – 2031	60



List of Acronyms

AHD	Australian Height Datum
BOM	Bureau of Meteorology
CCC	Community Consultative Committee
DA	Development Approval
DPE	Department of Planning and Environment
DRE	Division of Resources and Energy
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EPL	Environment Protection Licence
EP&A Act	Environmental Planning and Assessment Act 1979
GCC	Girilambone Copper Company
ML	Mining Lease
МОР	Mining Operations Plan
MPL	Mining Purpose Lease
	e i
NAF	Non-Acid Forming
NAF PAF	
	Non-Acid Forming
PAF	Non-Acid Forming Potentially Acid Forming
PAF POEO Act	Non-Acid Forming Potentially Acid Forming Protection of the Environment Operations Act 1997



1. Introduction to Mining Project

This *Rehabilitation Management Plan* (RMP) has been prepared by R.W. Corkery & Co. Pty. Limited (RWC) on behalf of Tritton Resources Pty Ltd (the "Company"), a wholly owned subsidiary of Aeris Resources Limited (Aeris), for the Tritton Copper Mine (the "Mine"). The Mine is located approximately 22km southwest of the village of Girilambone and approximately 45km northeast of the town of Nyngan (**Figure 1**). The principal mineral authority for the Mine is Mining Lease (ML)1544. For the purpose of this document, the area covered by ML1544 is referred to as the "Mine Site" (see **Figures 1** and **2**).

The Mine is one of four operational mines within the vicinity of Girilambone that are owned and operated by the Company, collectively referred to as the Tritton Copper Operations. For the purposes of this RMP, the Tritton Copper Operations consists of:

- the Tritton Copper Mine;
- the Murrawombie Copper Mine;
- the North East Copper Mine; and
- the Avoca Tank Mine,

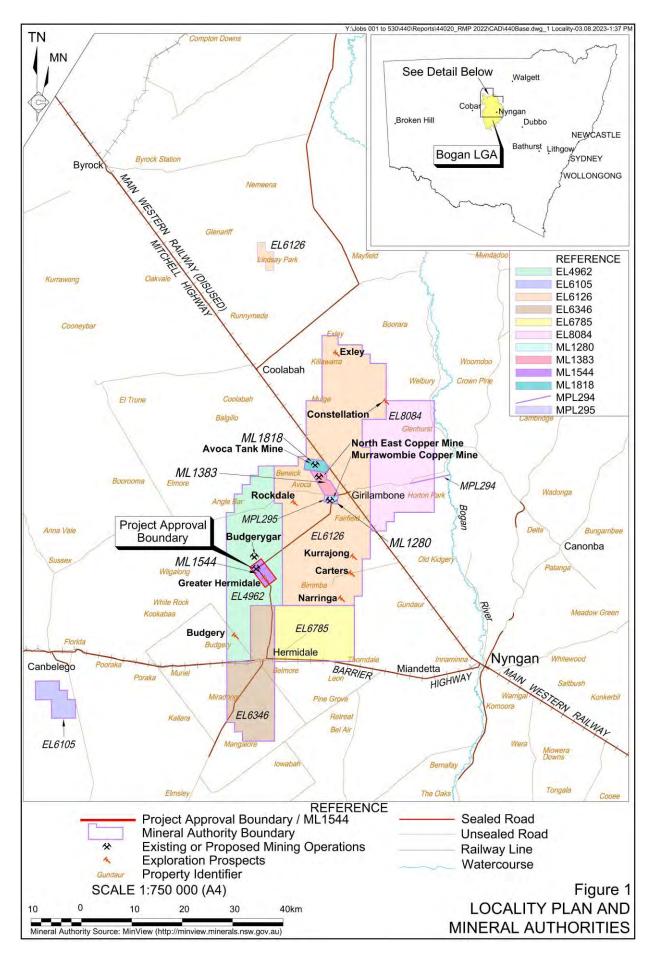
In general, all mines within Tritton Copper Operations are managed in parallel where practicable; as such, many existing assessments, approvals, and management plans may apply to multiple or all mines within the Tritton Copper Operations. This RMP relates only to the management of rehabilitation within the Mine Site (i.e. the Tritton Copper Mine).

The RMP is intended to provide a summary of current plans for progressive and final rehabilitation of the Mine Site and a practical guide to rehabilitation planning for site personnel. The RMP provides the following information.

- Introduction to the Mine (Section 1).
- Final land use information including regulatory requirements (Section 2).
- A summary of the current rehabilitation risk assessment outcomes (Section 3).
- A statement of the Company's rehabilitation objectives and the completion criteria that must be satisfied before rehabilitation is considered complete (Section 4).
- Final landform plans (Section 5).
- An overview of the planned implementation of progressive and final rehabilitation (Section 6).
- A summary of how rehabilitation quality will be maintained (Section 7).
- An overview of intended rehabilitation monitoring (Section 8) and ongoing research and trials (Section 9).

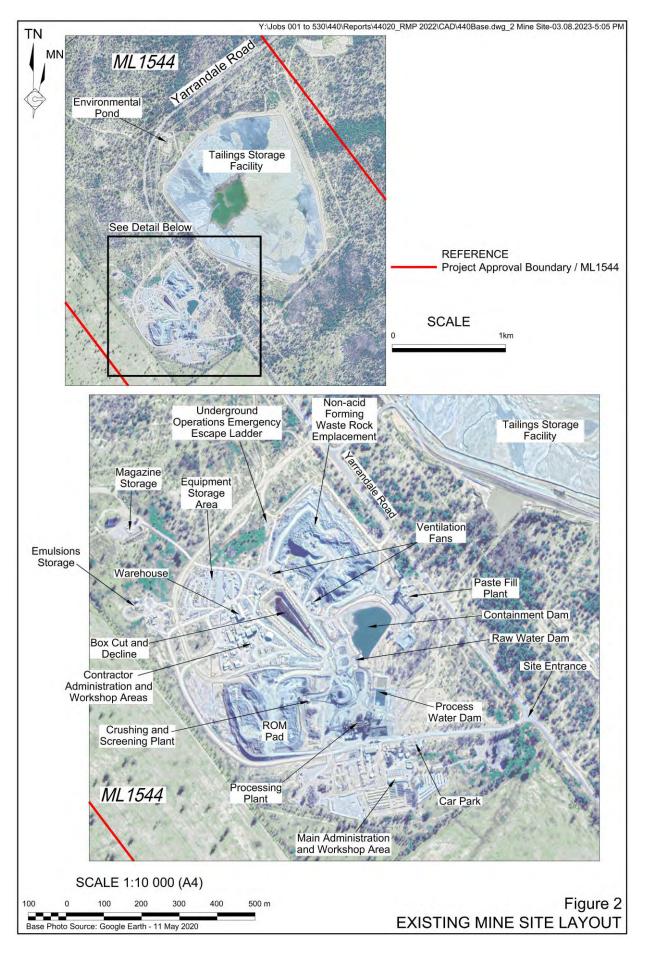


TRITTON RESOURCES PTY LTD *ML1544 – Tritton Copper Mine*





REHABILITATION MANAGEMENT PLAN *Report No. 440/20*





• A summary of the Company's management approach including a trigger action response plan (Section 10) and procedures for review and update of the plan (Section 11).

This RMP has been prepared in accordance with the following documents and guidelines.

- Form and Way: Rehabilitation Management Plan for Large Mines (July 2021).
- Form and Way: Rehabilitation Objectives, Rehabilitation Completion Criteria and Final Landform and Rehabilitation Plan for Large Mines (July 2021).
- Guideline 1: Rehabilitation Risk Assessment (July 2021).
- Guideline 2: Rehabilitation Records (July 2021).
- Guideline 3: Rehabilitation Controls (July 2021).
- Guideline 5: Rehabilitation Objectives and Rehabilitation Completion Criteria (July 2021).

1.1 History of Operations

1.1.1 Mining Activities

Historical Mining Activities

The Girilambone copper deposits were first discovered in 1879 with mining commencing in the vicinity of what is now the Girilambone village in 1881. Mining of other known deposits such as Budgerygar and Budgery (see **Figure 1**) occurred throughout 1906 to 1908 and 1920, respectively. Other minor historical mining operations are known to have occurred sporadically throughout the 20th century. Several other historic mining areas are known to be located throughout the area.

The Girilambone Copper Company (GCC), a Joint Venture between Tritton Resources Pty Ltd (60%) and Nord Pacific Ltd (40%) was formed in 1992, following development of the (then) Girilambone Copper Mine (now the Murrawombie Copper Mine), to undertake mineral exploration within relatively close proximity to the existing mine.

The Tritton Copper Mine

The mineralisation at the Mine Site was discovered in 1995. Following a series of preliminary assessments and preparation of an *Environmental Impact Statement*, Development Consent (DA) 41/98 was approved on 1 September 1999 by the Minister for Planning and Urban Affairs. Mining operations under DA 41/98 are approved until 21 December 2028. ML 1544 was issued by the former Department of Mineral Resources on 6 August 1992.

The current layout of the Mine Site is provided in **Figure 2**. The approved operations under DA 4/98 include the following.

• Extraction of a total of approximately 12.8 million (M) tonne (t) of copper ore using underground mining techniques.



- Construction and use of a Non-acid Forming Waste Rock Emplacement to a maximum height of 30m above the natural surface or approximately 301m AHD.
- Importation of no more than 1Mt of copper ore in a calendar year for processing at the Mine Site.
- Processing of on-site and imported copper ore to produce a copper concentrate.
- Export of no more than 30,000 tonnes of waste rock from the Mine Site in a calendar year, generally for the purposes of local road construction and maintenance.
- Transportation of the copper concentrate in shipping containers to the Hermidale rail siding, located approximately 19km to the south of the Mine Site, and transportation of that material by train to port for export.
- Construction and use of a Tailings Storage Facility.

1.1.2 Rehabilitation

To date all areas of the Mine Site remain active mining areas and only minor rehabilitation of the embankments of the Tailings Storage Facility (TSF) has commenced. Areas such as the TSF, Waste Rock Emplacement (WRE) and processing hardstand, will be rehabilitated progressively where available and/or at mine closure.

In 2021 the Company hydroseeded 5,000m² of the Northern TSF embankment. In 2020, the Company modified it's hydroseeding approach (to that applied in 2018) based on advice from its restoration ecologist. The modifications included maintaining dozer rip lines following soil amelioration (addition of gypsum) and trial the addition of biological resources. Previously dozer rip lines were tracked-in to provide a smooth surface for the hydromulch to ensure maximum coverage. It is anticipated that maintaining the rip lines and the addition of retained timber logs will accelerate ecological function and stability.

1.2 Current Development Consents, Leases and Licences

Table 1 presents the current consents, leases and licences for the Mine.

	Page 1 o					
Consent, Lease or Licence	No.	Issue Date	Expiry Date	Comment(s)		
Development	41/98	1/9/1999	N/A	Tritton Project Development		
Consent	029/2007	25/5/2007	N/A	Tritton new office block and bath house		
	2010/006	25/05/2010	13/9/2015	Construction of a Paste Fill Plant		
	2010/028	04/11/10	04/11/2015	Communication Tower		
	10/2019/021/001	15/01/2020	15/01/2025	Construction and use of Water Pipeline.		
	CDC2021/002	06/04/2021	06/04/2026	New Telecommunication Tower.		

Table 1 Consents, Leases and Licenses



Table 1 (Cont'd) Consents, Leases and Licenses

		Consents, L	eases and L	Page 2 of 2
Consent, Lease	Na	Jacob Data	Euroim / Data	
or Licence	No.	Issue Date	Expiry Date	Comment(s)
Development Consent	41/98 MOD1	26/08/2004	22/12/2024	Increased mining schedule and extended life of mine.
Modifications	41/98 MOD2	22/09/2005	22/12/2024	Tailings Storage Facility Construction.
	41/98 MOD3	19/06/2007	22/12/2024	Waste Rock Emplacement Construction.
	41/98 MOD4	19/12/2007	22/12/2024	Expansion of the Tritton Copper Mine Processing Plant and Tailings Storage Facility.
	41/98 MOD5	07/04/2015	22/12/2024	Waste Rock Emplacement construction, mineral ore import and export of crushed waste rock.
	41/98 MOD6	30/01/2019	21/12/2024	Excavation and exportation of tailings from Tailings Storage Facility for use in the Paste Fill Plant at the Murrawombie Copper Mine.
	41/98 MOD7	12/10/2021	21/12/2024	Construction of two ventilation rises to support underground exploration activities.
	41/98 MOD8	02/06/2022	21/12/2028	Various modifications, including underground mining of the Budgerygar deposit and installation of ancillary surface infrastructure, approximate 10m raise to the existing approved Waste Rock Emplacement, disposal of the materials within the Tailings Storage Facility and an extension to the Mine life until 21 December 2028.
Exploration Licence	EL4962	19/03/1996	19/03/2028	Exploration Activities.
Mining Lease	ML1544	22/12/2003	22/12/2024	Mining Activities.
Water Access	WAL 009374	24/02/2005	Perpetuity	Water Licence.
Licence	WAL 009375	24/02/2005	Perpetuity	
	WAL009940	01/07/2004	Perpetuity	
	WAL 31090	30/07/2006	Perpetuity	Dewatering Underground Mine.
Water Use and	80WA702816	24/02/2005	23/02/2020	Gunningbar Creek and Bogan River Pumps.
Works Approval	80WA716044	16/01/2012	28/05/2017	Dewatering Underground Mine.
Authority for Joint Supply Scheme	80SAD10630	24/02/2005	Ongoing	Joint Supply Works Pumps on Bogan River.
Water Bore	80BL 239188	04/01/2001	Perpetuity	Tailings Storage Facility Monitoring Bores.
Licence	80BL 239189	04/01/2001	Perpetuity	
	80BL 239190	04/01/2001	Perpetuity	
	80BL 239191	04/01/2001	Perpetuity	
	80BL 239192	04/01/2001	Perpetuity	
	80BL 239193	04/01/2001	Perpetuity	
	80BL 239194	04/01/2001	Perpetuity	
	80BL 245969	25/06/2010	Perpetuity	
Source: Tritton Reso	urces Pty Ltd			



1.3 Land Ownership and Land Use

Table 2 presents the land ownership for land within Mine Site. Land within the Mine Site is predominantly freehold land owned by the Company and a Private landowner, with some Crown land comprising a Travelling Stock Route and the Yarrandale Road reserve. **Figure 3** presents the land ownership surrounding the Mine Site.

		1	•					
Lot	Deposited Plan	Tenure	Owner	Leases				
Mine S	Mine Site							
61	875925	Freehold	Tritton Resources Pty Limited	ML 1544				
41	879206	Freehold	Tritton Resources Pty Limited	ML 1544				
62	875925	Freehold	Private Individual	ML 1544				
42	879206	Freehold	Private Individual	ML 1544				
7321	1160810	Crown Land	The State of NSW	ML 1544				
7320	1160810	Crown Land	The State of NSW	ML 1544				
7319	1160810	Crown Land	The State of NSW	ML 1544				
7004	1126793	Crown Land	The State of NSW	ML 1544				
13	751346	Crown Land	The State of NSW	ML 1544				
7318	1160810	Crown Land	The State of NSW	ML 1544				
14	751346	Freehold	Straits Mining Pty Limited	ML 1544				
Land A	Adjacent to the Min	e Site	· ·	·				
1	751346	Freehold	Private Individual	ML 1544				
1, 3, 8	751308	Freehold	Private Individual	ML 1544				
1, 8	751327	Freehold	Private Individual	ML 1544				
6	751327	Freehold	Private Individual	ML 1544				
8	751346	Freehold	Dom-Pat Holding Pty Ltd	ML 1544				
9	751346	Freehold	Straits Mining Pty Limited	ML 1544				
7	751346	Freehold	Private Individual	ML 1544				
22	751322	Freehold	Private Individual	ML 1544				
23	751322	Freehold	Private Individual	ML 1544				
6	751312	Freehold	Private Individual	ML 1544				

Table 2 Land Ownership

Current land uses within and surrounding the Mine Site include the following (displayed on Figure 4).

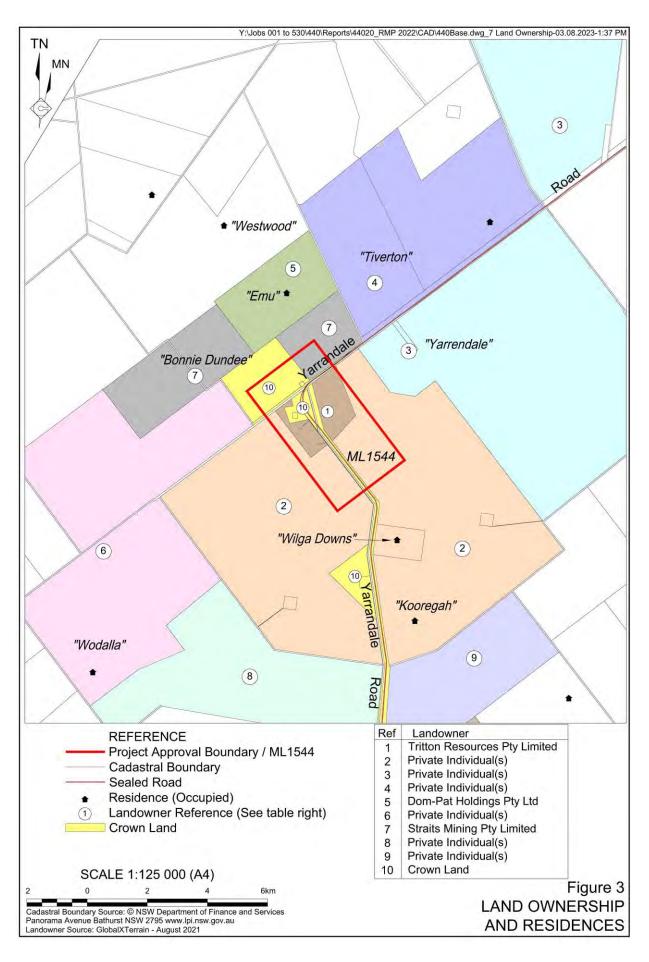
- Mining activities.
- Agriculture, principally wheat cropping and sheep and cattle grazing.
- Transportation, namely Yarrandale Road.

Historical land use withing and in the vicinity of the Mine Site and the Tritton Copper Operations is discussed in Section 1.1.1.



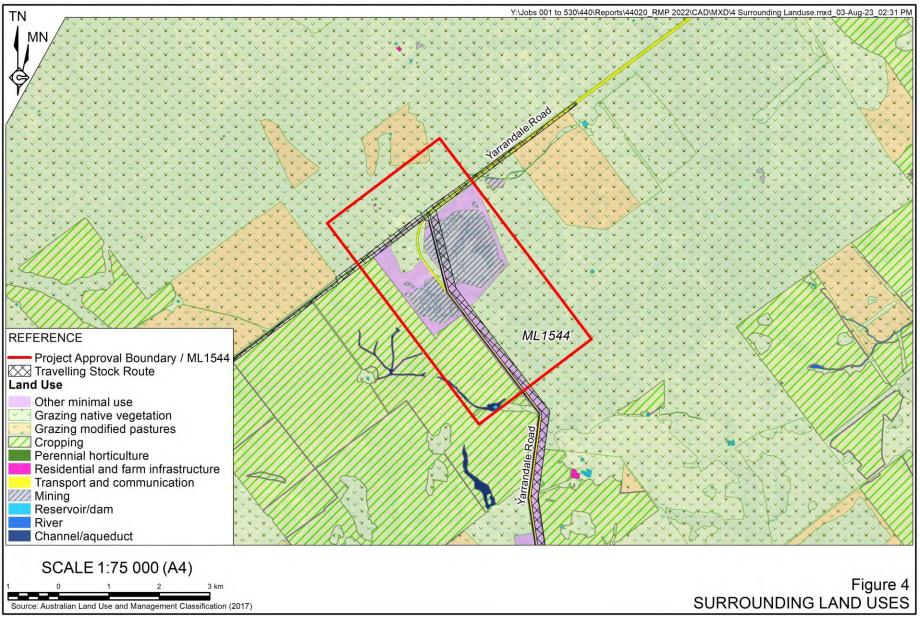
TRITTON RESOURCES PTY LTD

ML1544 – Tritton Copper Mine





REHABILITATION MANAGEMENT PLAN Report No. 440/20



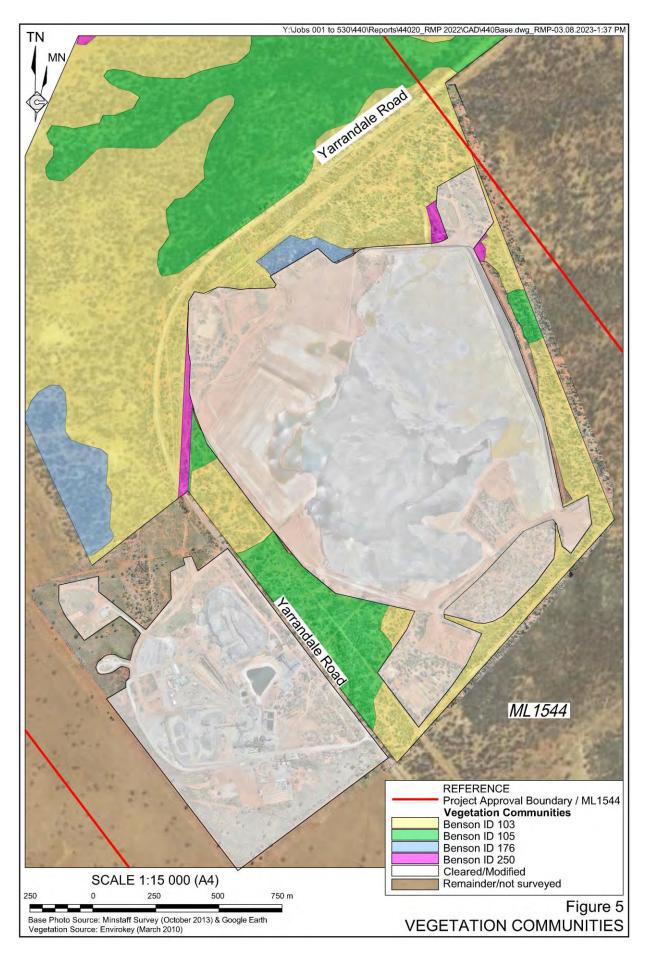


Proposed final land uses for the Mine Site are detailed in Section 2 of this RMP. In summary, it is proposed that final land uses will consist of mixed vegetation commensurate with surrounding land uses and capable of supporting light agricultural grazing.

1.3.1 Land Ownership and Land Use Figures

Figure 3 presents land ownership for areas within and surrounding the Mine Site. Figure 4 presents land uses in the vicinity of the Mine Site. Figure 5 presents vegetation communities within the Mine Site and within the surrounding region. Figure 6 presents land zoning in the vicinity of the Mine Site.







TRITTON RESOURCES PTY LTD



