PRCP schedule

Environmental Protection Act 1994

PRCP schedule PRCP_EPML00732813_V3 Ensham Coal Mine

This is the approved form for a PRCP schedule issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994*.*

PRCP schedule: PRCP_EPML00732813_V3

PRCP schedule holder(s)

Name(s)	Registered address
Bligh Coal Pty Ltd – ABN 20 010 186 393 Idemitsu Australia Pty Ltd – ABN 45 010 236 272 Bowen Investment (Australia) – ABN 12 002 806 831	Level 9, 175 Eagle Street, Brisbane City Qld 4000

Location details

Location(s)
Mining Lease (ML) 7459, 7460, 70049, 70326, 70365, 70366, 70367

Take effect

In accordance with section 202B of the *Environmental Protection Act 1994* (EP Act), the PRCP schedule has effect on the day the environmental authority for carrying out relevant activities on land to which the schedule relates takes effect. Pursuant to section 202C of the EP Act, a PRCP schedule continues in force until the environmental authority for the relevant activities to which the PRCP schedule relates is cancelled or surrendered, even if the resource tenure expires or is cancelled and even if the relevant environmental authority is suspended under Chapter 5, part 11 or 11A of the EP Act.

	14 July 2023
Signature	Date

Dr. Alison Cummings
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Business Centre (Coal)
Department of Environment and Science
PO Box 3028, Emerald QLD 4720
Phone: (07) 4987 9320
Email: CRMining@des.qld.gov.au

Queensland Government

Obligations under the *Environmental Protection Act 1994*

Pursuant to section 202E of the EP Act, if there is an inconsistency between an environmental authority and a PRCP schedule, the environmental authority prevails to the extent of the inconsistency.

Pursuant to section 285 of the EP Act:

- the holder of a PRCP schedule must commission an audit of the schedule by a rehabilitation auditor for the following periods (each an audit period) —

  (a) the 3-year period starting on the day the schedule takes effect

  (b) each 3-year period starting on the day after the previous audit period ended.

- the holder must, within 4 months after the end of each audit period, give the administering authority -

  (a) the rehabilitation auditor's report (an audit report) about the audit that complies with section 286 of the EP Act, and

  (b) a declaration for the audit report that complies with section 285 of the EP Act.

In addition to the requirements found in the conditions of this PRCP schedule, the holder must also meet their obligations under the environmental authority, the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the EP Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443).

Pursuant to section 318ZB of the EP Act:

1) This section applies if progressive certification has been given for a relevant tenure.

2) The holder of the environmental authority to which the relevant tenure relates must maintain the certified area for the relevant tenure under the conditions of the authority, or rehabilitation milestones or management milestones under a PRCP schedule, in force when the certification was given (the *existing conditions*).

3) Any change to the conditions of the environmental authority, or rehabilitation milestones or management milestones under the schedule, is of no effect to the extent it purports to impose a more stringent obligation for the certified area than an obligation applying under the existing conditions or milestones.

4) The obligation under subsection (2) ends on the last of the following to happen –

   a) The surrender under resource legislation of the relevant tenure, or part of the relevant tenure;

   b) The environmental authority or PRCP schedule ends or ceases to have effect;

   c) If the existing conditions include a condition requiring compliance with an obligation after the authority ends or ceases to have effect – compliance with the condition.

PRCP schedule

The PRCP schedule incorporates the following sections:

- Section A - Conditions of PRCP schedule
- Section B - Final site design maps
- Section C - Post mining land uses
- Section D - Non-use management areas.

Section A - Conditions of PRCP schedule

Pursuant to section 206A of the EP Act:

- it is a condition of this PRCP schedule that, in carrying out a relevant activity under the schedule, the holder must comply with a requirement stated in the environmental authority relevant to carrying out the activity.
- it is a condition of this PRCP schedule that the holder must comply with the following matters stated in the schedule -

  (a) each rehabilitation milestone and management milestone

  (b) when each rehabilitation milestone and management milestone is to be achieved

General conditions

PRCP1 The holder must comply with each milestone criteria stated in the schedule

PRCP2 Where a milestone criterion requires any of the following, the holder must keep records of the actions taken to comply with the criterion as well as the results and provide a copy of this information to the Administering Authority on request -

(i) certifications or assessments to be undertaken;

(ii) monitoring or maintenance to be carried out;

(iii) final design plans and/or specifications to be developed; and

(iv) reports such as contaminated land investigations, rehabilitation reports (including monitoring records), validation reports, Quality Assurance/Quality Control reports.

PRCP3 Progressive rehabilitation must be carried out in accordance with the milestones and criteria in this schedule. Where completion of the first milestone for a "**cumulative area available**[1]" for a rehabilitation area occurs earlier than in the schedule, each subsequent milestone for that **cumulative area available** is brought forward by the same amount of time as the first milestone has been brought forward.

PRCP4 Disturbance due to exploration activities in areas not authorised to be mined must be rehabilitated in accordance with the provisions detailed in the *Eligibility criteria and standard conditions for exploration and mineral development projects* or its successor, with the exception that land must be rehabilitated to a **stable condition**[2] that achieves the relevant PMLU as indicated by Figure 1 Final Site Design.

[1]*Cumulative Area Available* refers specifically to the total area in a cell in the row titled "cumulative area available (ha)", and not the entire rehabilitation area (RA).

[2]*stable condition* is defined by s111A of the *Environmental Protection Act 1994*

END OF CONDITIONS

Section B - Final site design maps

Figure 1 – Final Site Design (Undisturbed Areas)

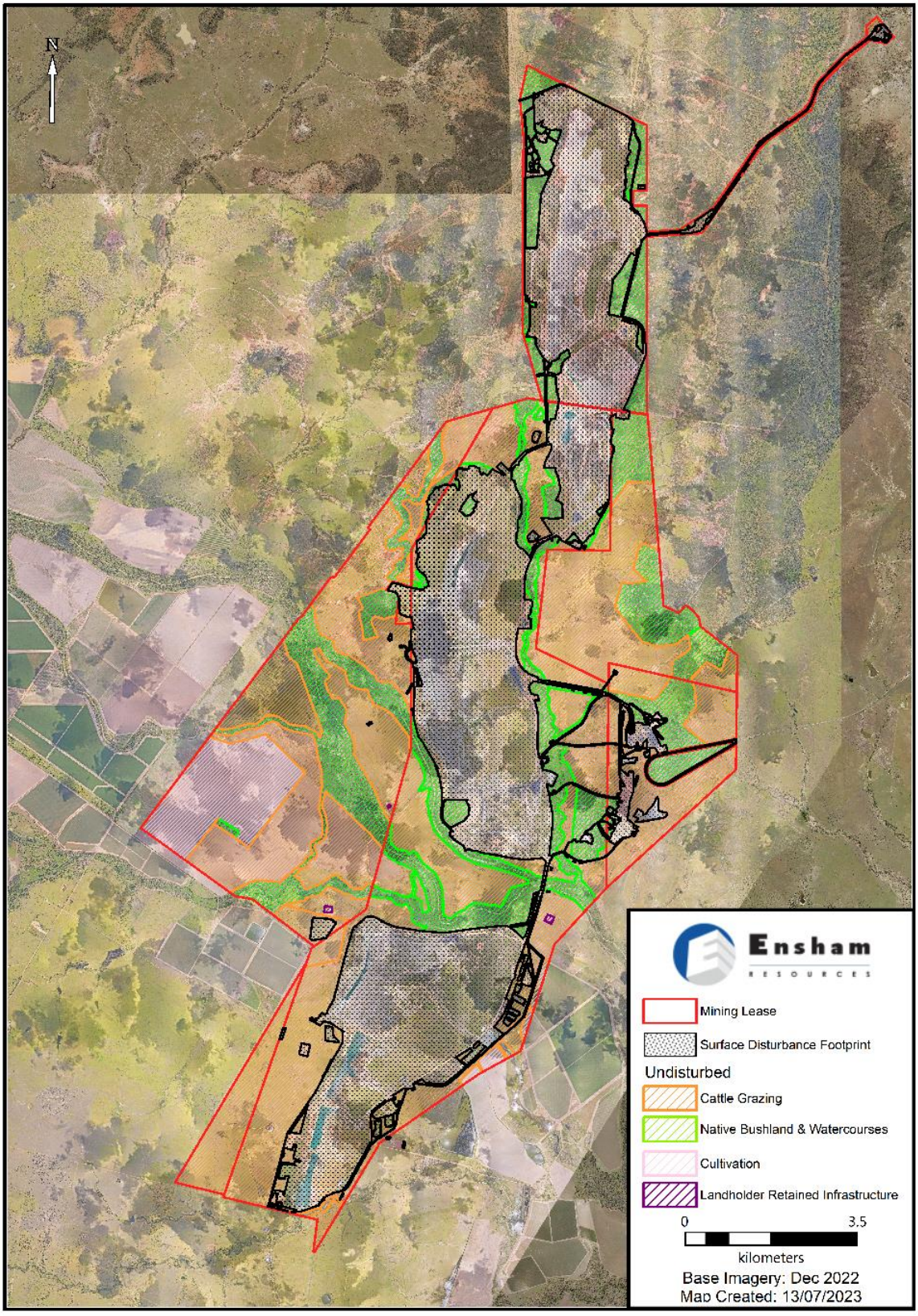


Figure 2 – Final Site Design (Post-mining Land Use Areas)

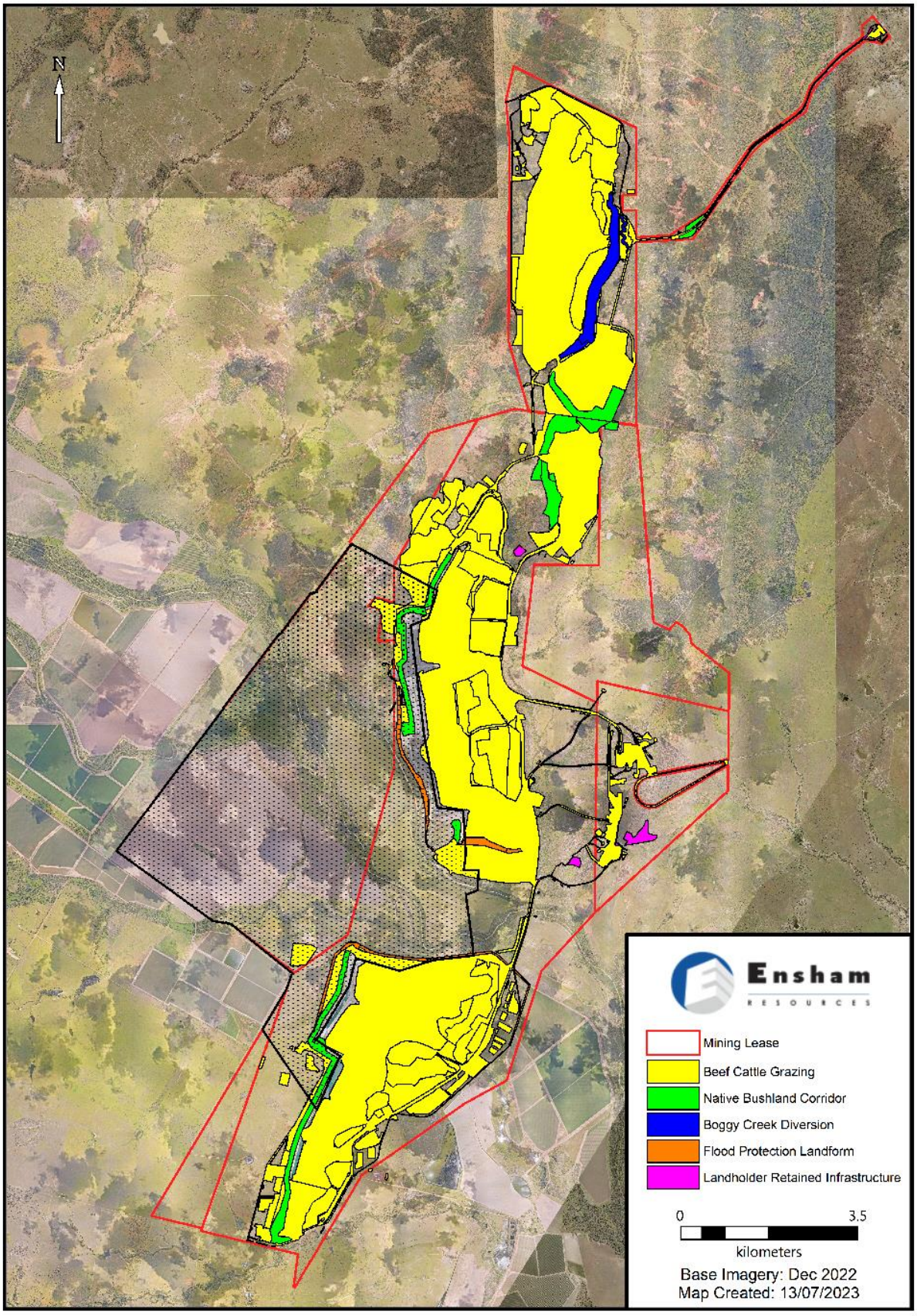


Figure 3 – Final Site Design Zone 2 Flare Location

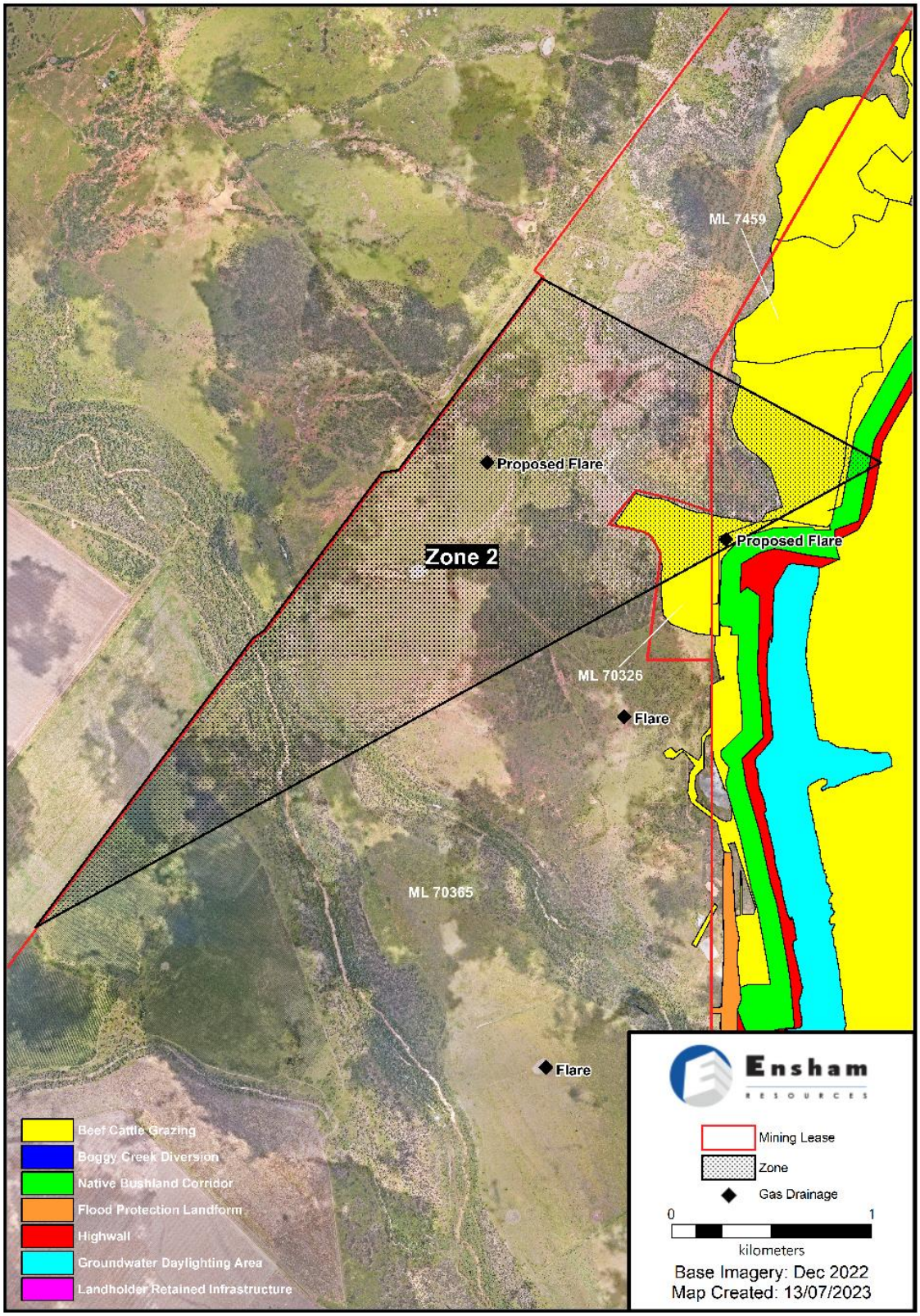


Figure 4 – Final Site Design Zone 3 Flare Location

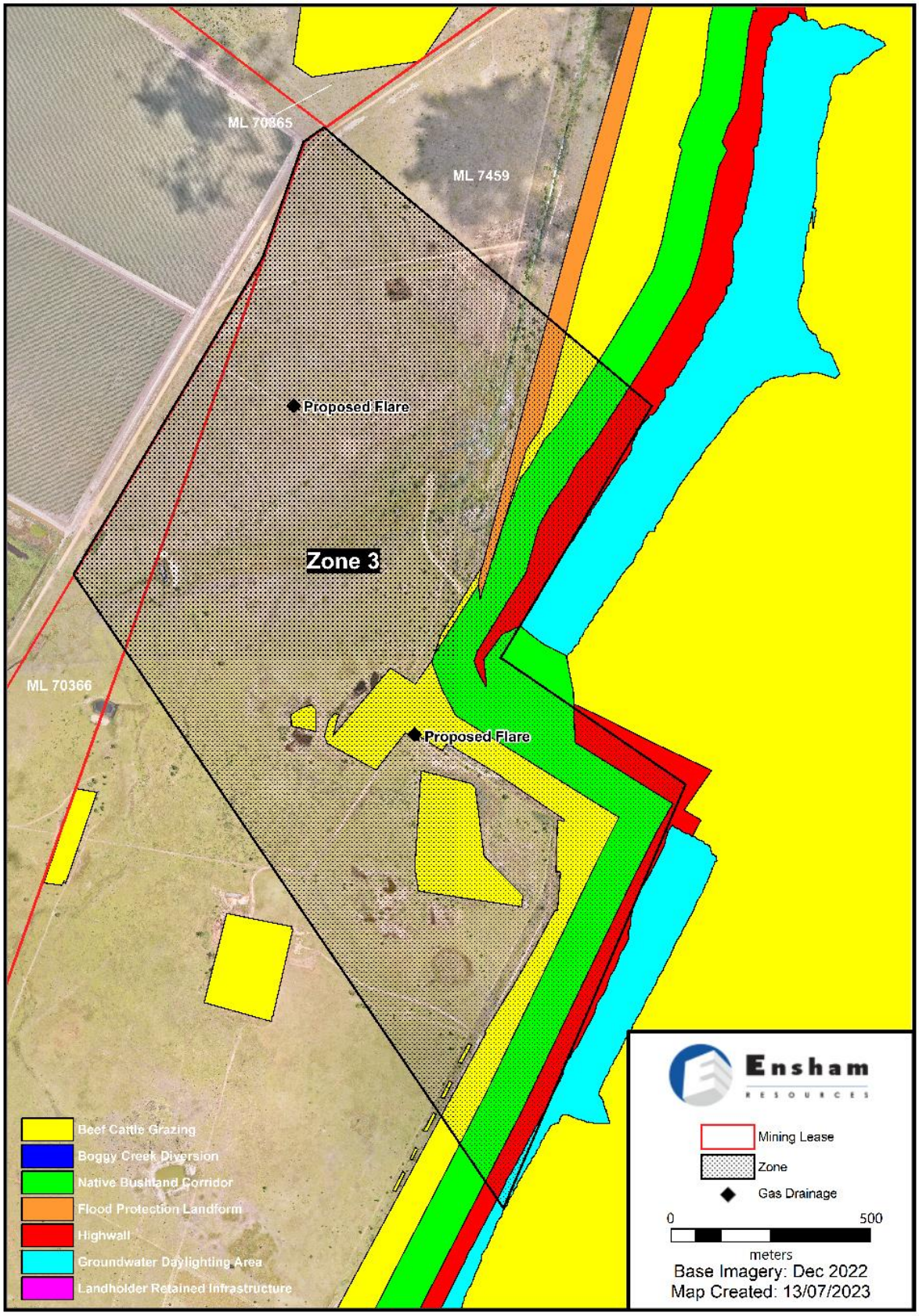
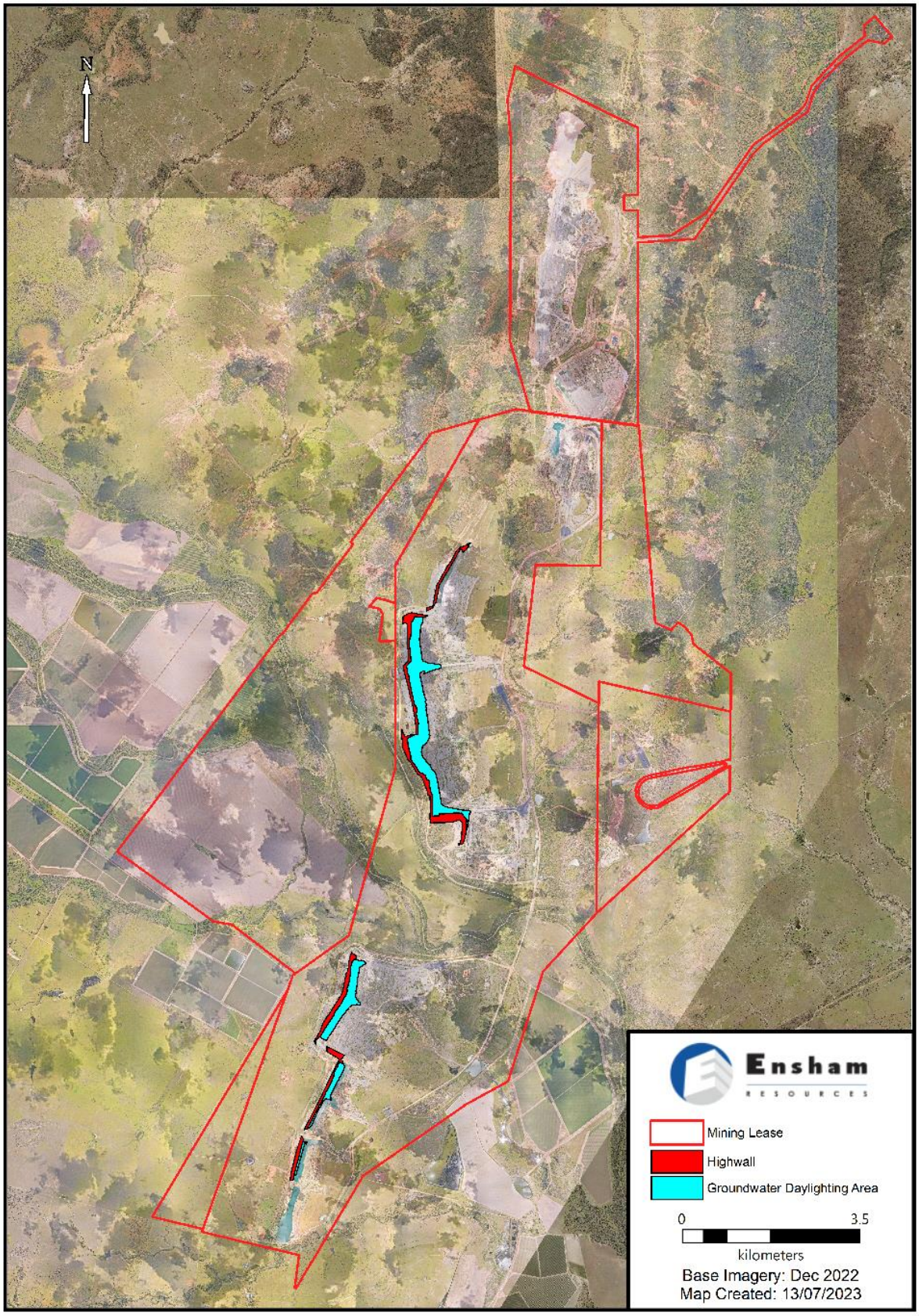


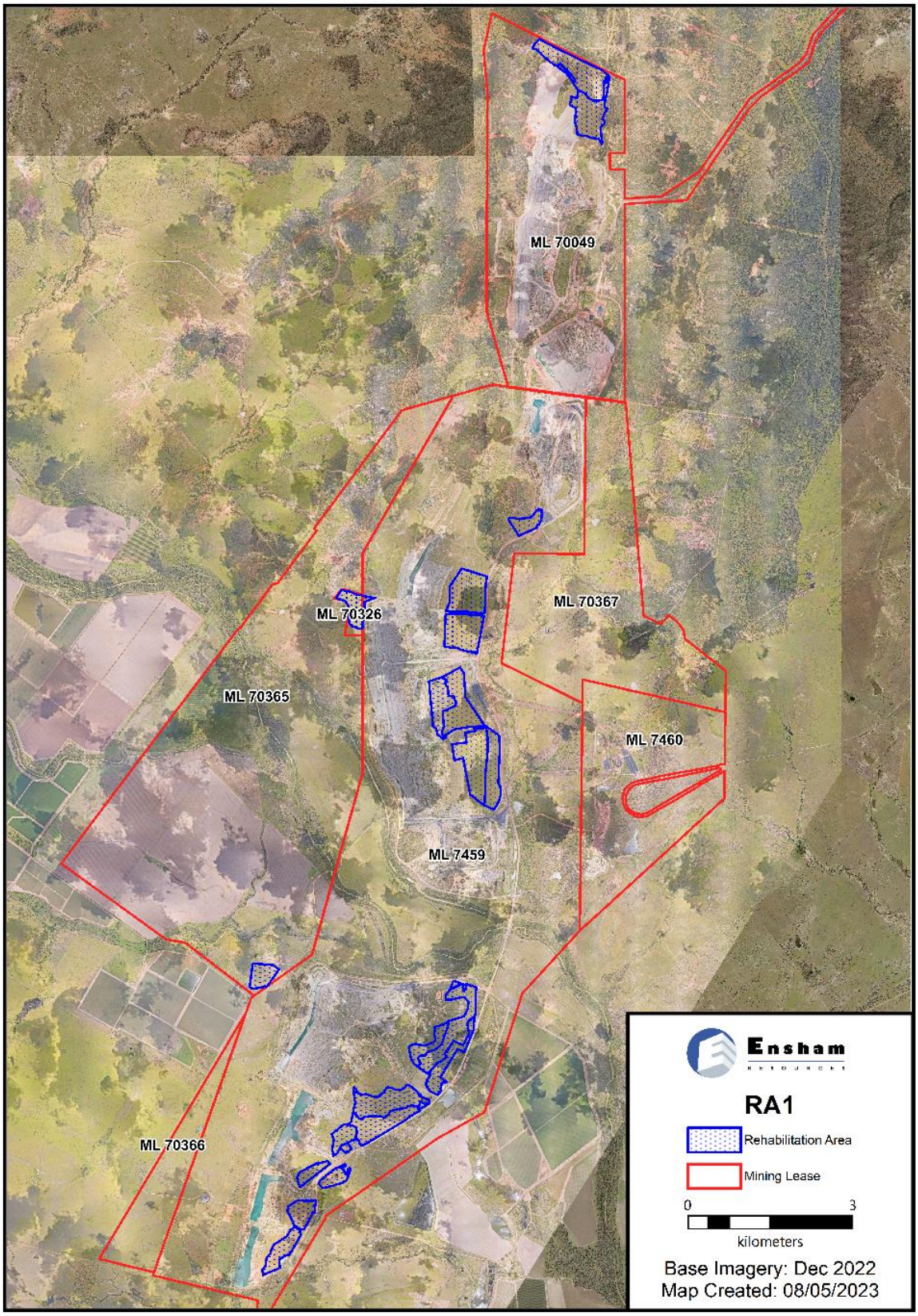
Figure 5 – Final Site Design (Non-use Management Areas)



Section C – Post mining land uses

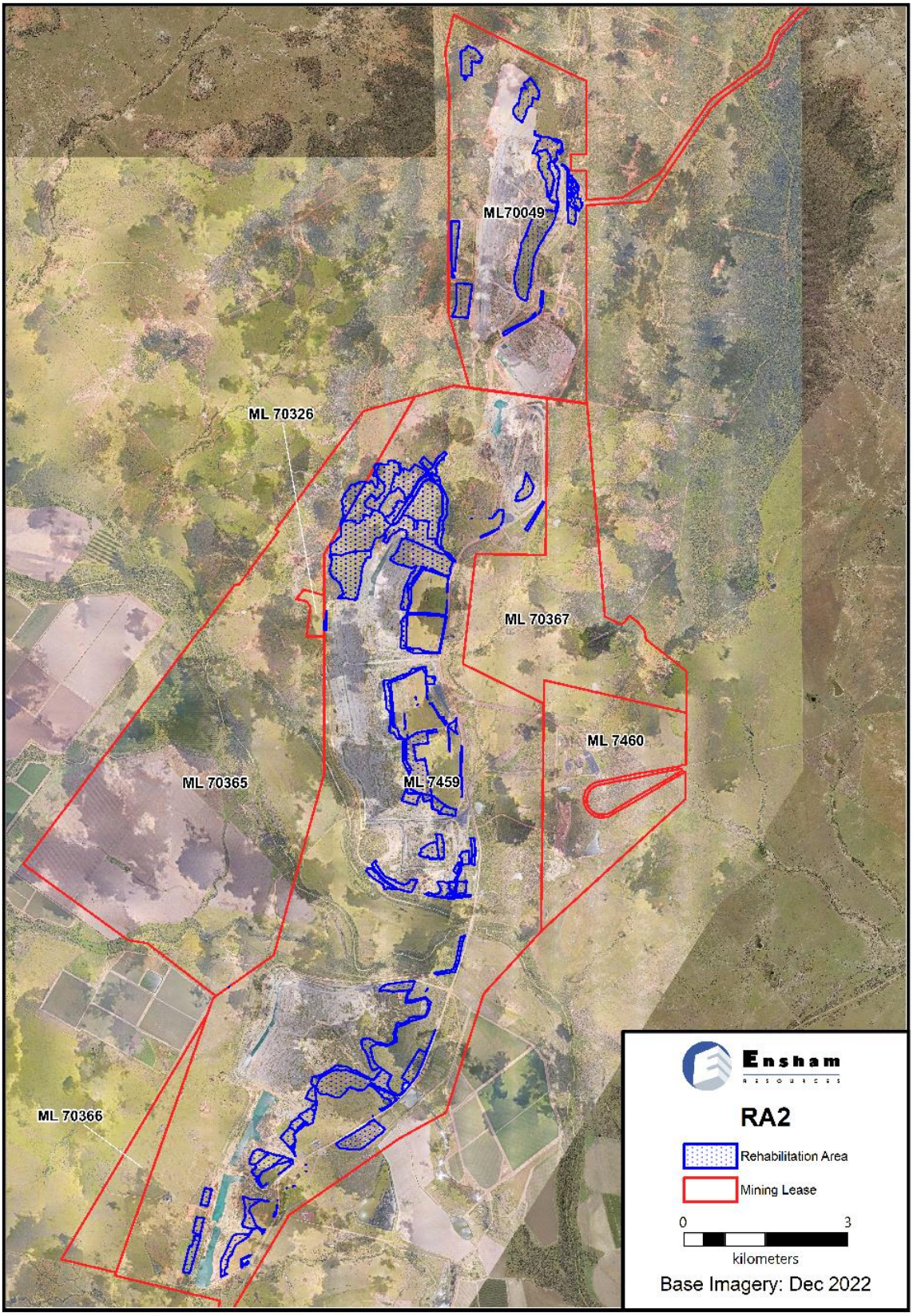
(RA1) Rehabilitation area 1

Post-mining land uses (PMLU)										
Rehabilitation area (description)	RA1 (N/A – existing rehabilitation progressively certified)									
Relevant activities	-									
Total rehabilitation area size (ha)	662.8									
Commencement of first milestone:	Progressive rehabilitation certified in 2018 and 2021									
PMLU	Cattle grazing									
Date area is available										
Cumulative area available (ha)										
Milestone completed by										
Milestone Reference	**Cumulative area achieved (ha)**									
***** No milestones apply as these areas have been progressively certified. *										


ML 70049
ML 70326
ML 70367
ML 70365
ML 7460
ML 7459
ML 70366
Ensham
RA1
Rehabilitation Area
Mining Lease
0
3
kilometers
Base Imagery: Dec 2022
Map Created: 08/05/2023

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)			
Rehabilitation area (description)	RA2 (existing rehabilitation)		
Relevant activities	Mine domain 1 - Overburden / infrastructure areas, including overburden emplacement areas, low walls, mine infrastructure areas, and surface disturbance associated with underground mining (Figure 9-10 Rehabilitation Area 2 (RA 02))		
Total rehabilitation area size (ha)	832.3		
Commencement of first milestone: RM6	1/01/2022		
PMLU	Cattle grazing		
Date area is available	1/01/22	1/01/22	
Cumulative area available (ha)	34.0	832.3	
Milestone completed by	10/12/23	10/12/43	
Milestone Reference	**Cumulative area achieved (ha)**		
RM6	34		
RM7		832.3	


ML70049
ML 70326
ML 70367
ML 7460
ML 70365
ML 7459
ML 70366
Ensham
RESOURCES
RA2
Rehabilitation Area
Mining Lease
0
3
kilometers
Base Imagery: Dec 2022

(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)		
Rehabilitation area (description)	RA3 (existing rehabilitation)	
Relevant activities	Mine domain 4 – cleared areas (Figure 9-11 Rehabilitation Area 3 (RA 03))	
Total rehabilitation area size (ha)	83.2	
Commencement of first milestone: RM10	1/01/2022	
PMLU	Native bushland corridor	
Date area is available	1/01/22	
Cumulative area available (ha)	83.2	
Milestone completed by	10/12/43	
Milestone Reference	**Cumulative area achieved (ha)**	
RM10	83.2	

ML70049
ML 7459
ML 70367
Ensham
RESOURCES
RA3
Rehabilitation Area
Mining Lease
0
1
kilometers
Base Imagery: Dec 2022

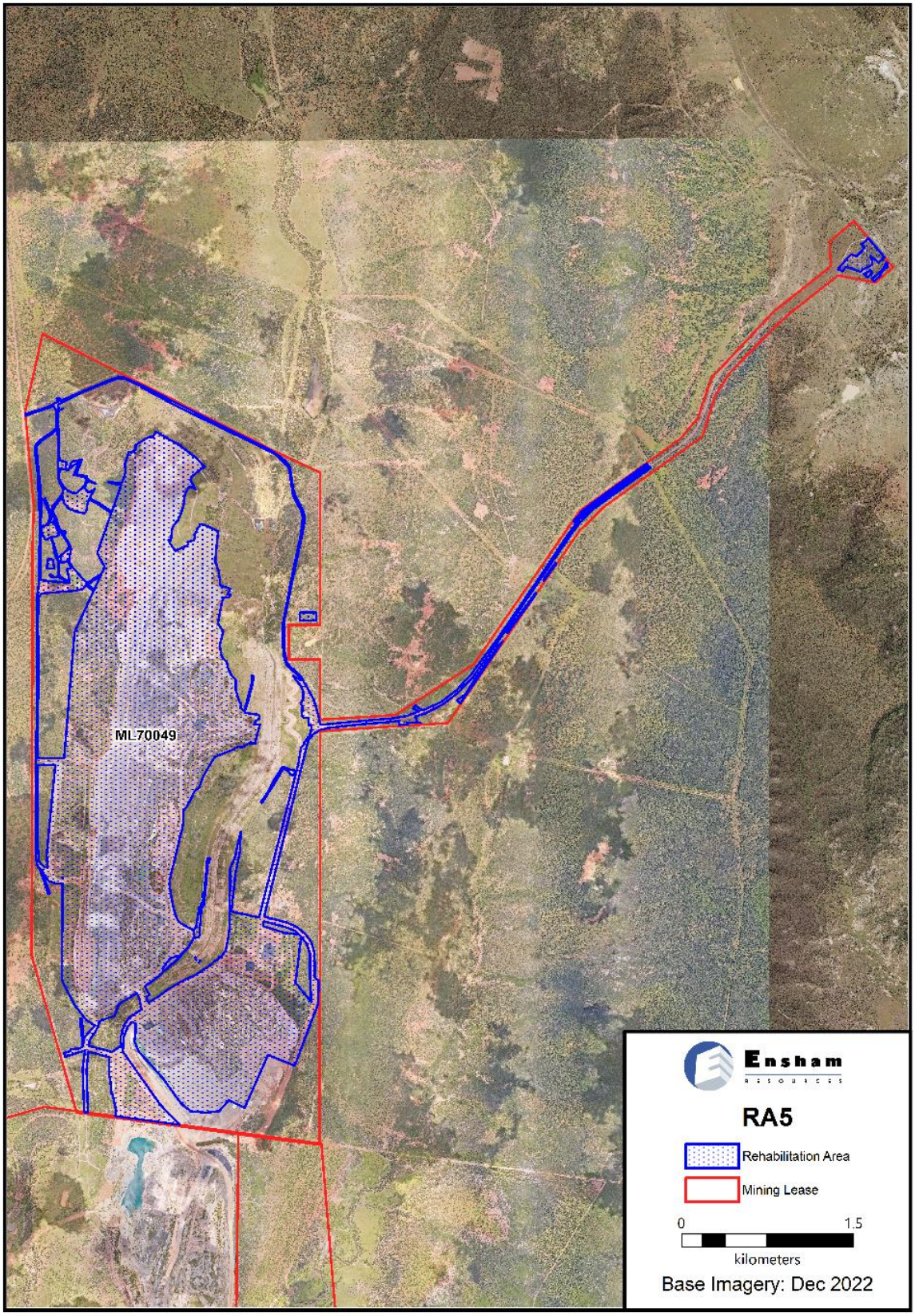
(RA4) Rehabilitation area 4

Post-mining land uses (PMLU)			
Rehabilitation area (description)	RA4 (existing rehabilitation)		
Relevant activities	Mine domain 3 - Boggy creek diversion (Figure 9-12 Rehabilitation Area 4 (RA 04))		
Total rehabilitation area size (ha)	70.3		
Commencement of first milestone: RM6	1/01/2022		
PMLU	Boggy Creek diversion		
Date area is available	1/01/22		
Cumulative area available (ha)	70.3		
Milestone completed by	10/12/24	10/12/28	
Milestone Reference	**Cumulative area achieved (ha)**		
RM6	70.3		
RM9		70.3	

ML70049
Ensham
RESOURCES
RA4
Rehabilitation Area
Mining Lease
0
500
meters
Base Imagery: Dec 2022

(RA5) Rehabilitation area 5

Post-mining land uses (PMLU)											
Rehabilitation area (description)	RA5 (Yongala Cattle Grazing)										
Relevant activities	Mine domain 1 – Overburden / infrastructure areas, including overburden emplacement areas, low walls, mine infrastructure areas, borrow pits, sewage ponds, roads and dams (Figure 9-13 Rehabilitation Area 5 (RA 05))										
Total rehabilitation area size (ha)	795.2										
Commencement of first milestone: RM1	1/01/2022										
PMLU	Cattle grazing										
Date area is available	1/01/22	1/01/24	1/01/25	1/01/26	1/01/27						
Cumulative area available (ha)	185.9	378.2	436.3	526.8	795.2						
Milestone completed by	10/12/23	10/12/24	10/12/25	10/12/26	10/12/27	10/12/28	10/12/29	10/12/30	10/12/31	10/12/32	10/12/33
Milestone Reference	**Cumulative area achieved (ha)**										
RM1					795.2						
RM2					2						
RM3	185.9	378.2	436.3	526.8	795.2						
RM4	104.7	185.9	378.2	436.3	526.8	795.2					
RM5	104.7	185.9	378.2	436.3	526.8	795.2					
RM6			104.7	185.9	378.2	436.3	526.8	795.2			
RM7						104.7	185.9	378.2	436.3	526.8	795.2


ML70049
Ensham
RA5
Rehabilitation Area
Mining Lease
0
1.5
kilometers
Base Imagery: Dec 2022

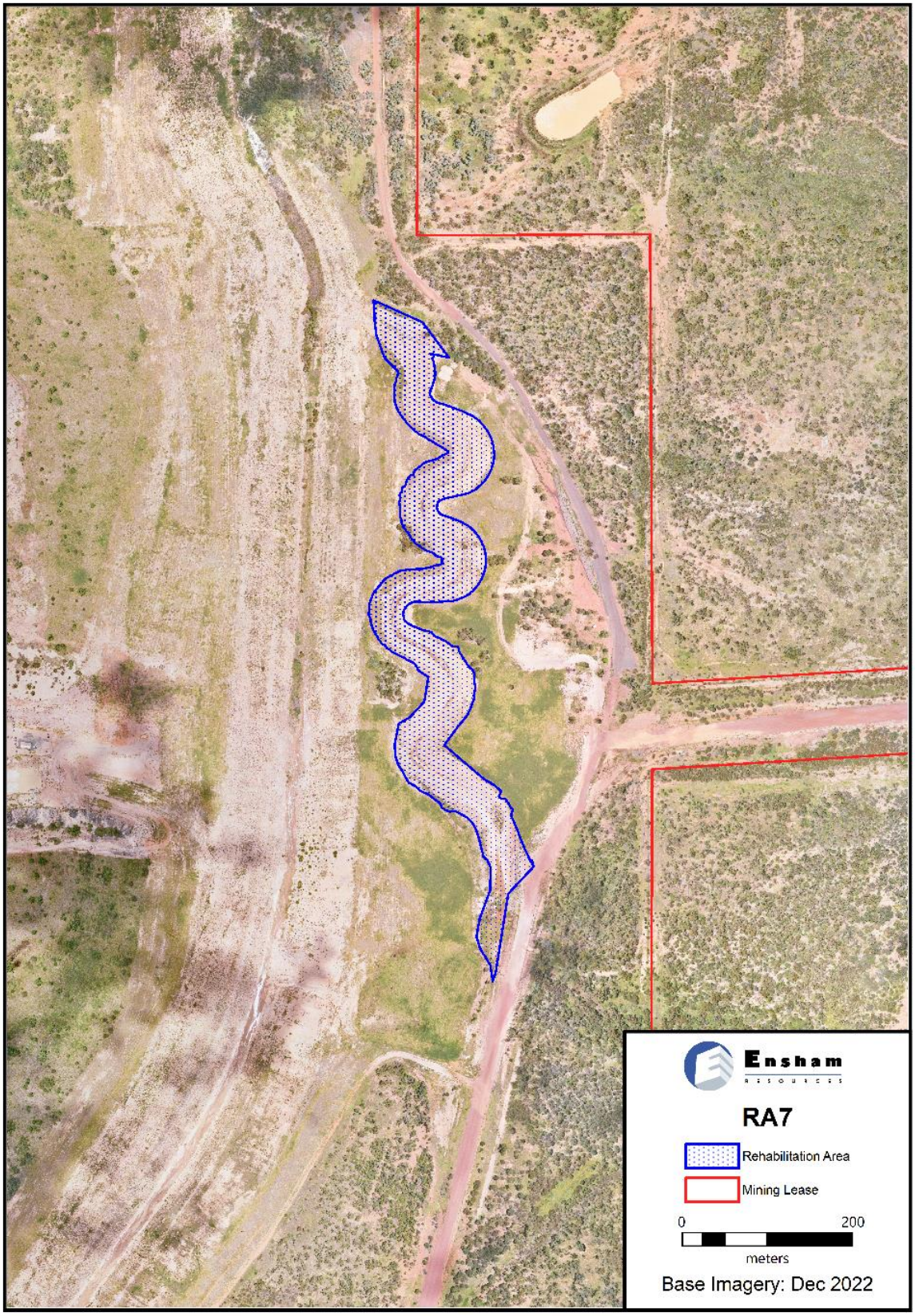
(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)				
Rehabilitation area (description)	RA6 (Yongala Native Bushland Corridor)			
Relevant activities	Mine domain 3 – Overburden / mine disturbed areas including overburden emplacement areas, low walls, highwalls and cleared areas (Figure 9-14 Rehabilitation Area 6 (RA 06))			
Total rehabilitation area size (ha)	39.0			
Commencement of first milestone: RM3	1/01/2027			
PMLU	Native bushland corridor			
Date area is available	1/01/27			
Cumulative area available (ha)	39.0			
Milestone completed by	10/12/27	10/12/30	10/12/32	
Milestone Reference	**Cumulative area achieved (ha)**			
RM3	39.0			
RM4	39.0			
RM5	39.0			
RM6		39.0		
RM10			39.0	

ML70049
ML 70367
ML 7459
Ensham
RESOURCES
RA6
Rehabilitation Area
Mining Lease
0
500
meters
Base Imagery: Dec 2022

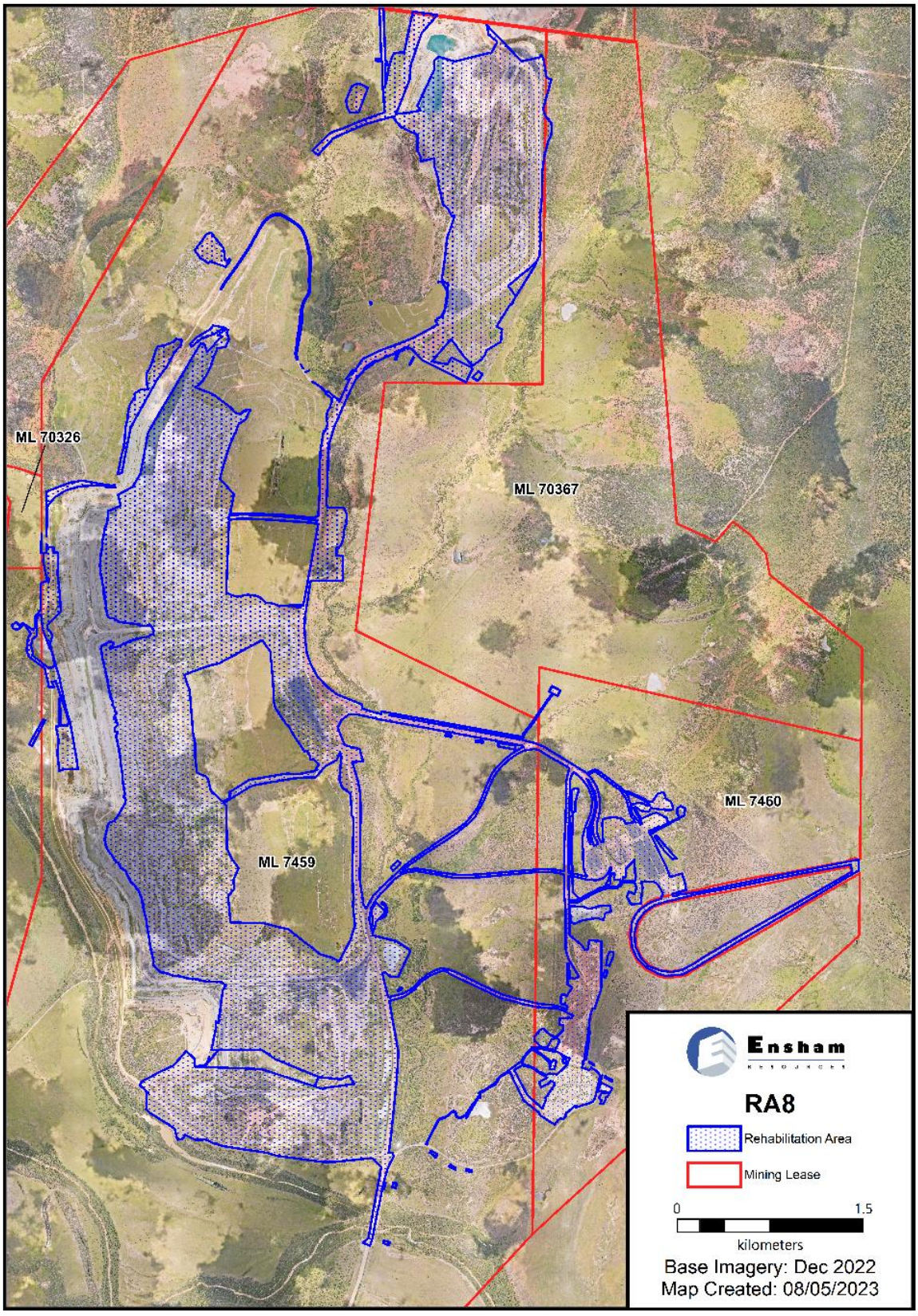
(RA7) Rehabilitation area 7

Post-mining land uses (PMLU)				
Rehabilitation area (description)	RA7 (Yongala Boggy Creek Diversion)			
Relevant activities	Mine domain 3 - Boggy creek diversion (adjoining areas) (Figure 9-15 Rehabilitation Area 7 (RA 07))			
Total rehabilitation area size (ha)	4.7			
Commencement of first milestone: RM4	1/01/2022			
PMLU	Boggy creek diversion			
Date area is available	1/01/22			
Cumulative area available (ha)	4.7			
Milestone completed by	10/12/23	10/12/25	10/12/28	
Milestone Reference	**Cumulative area achieved (ha)**			
RM4	4.7			
RM5	4.7			
RM6		4.7		
RM9			4.7	


Ensham
RESOURCES
RA7
Rehabilitation Area
Mining Lease
0
200
meters
Base Imagery: Dec 2022

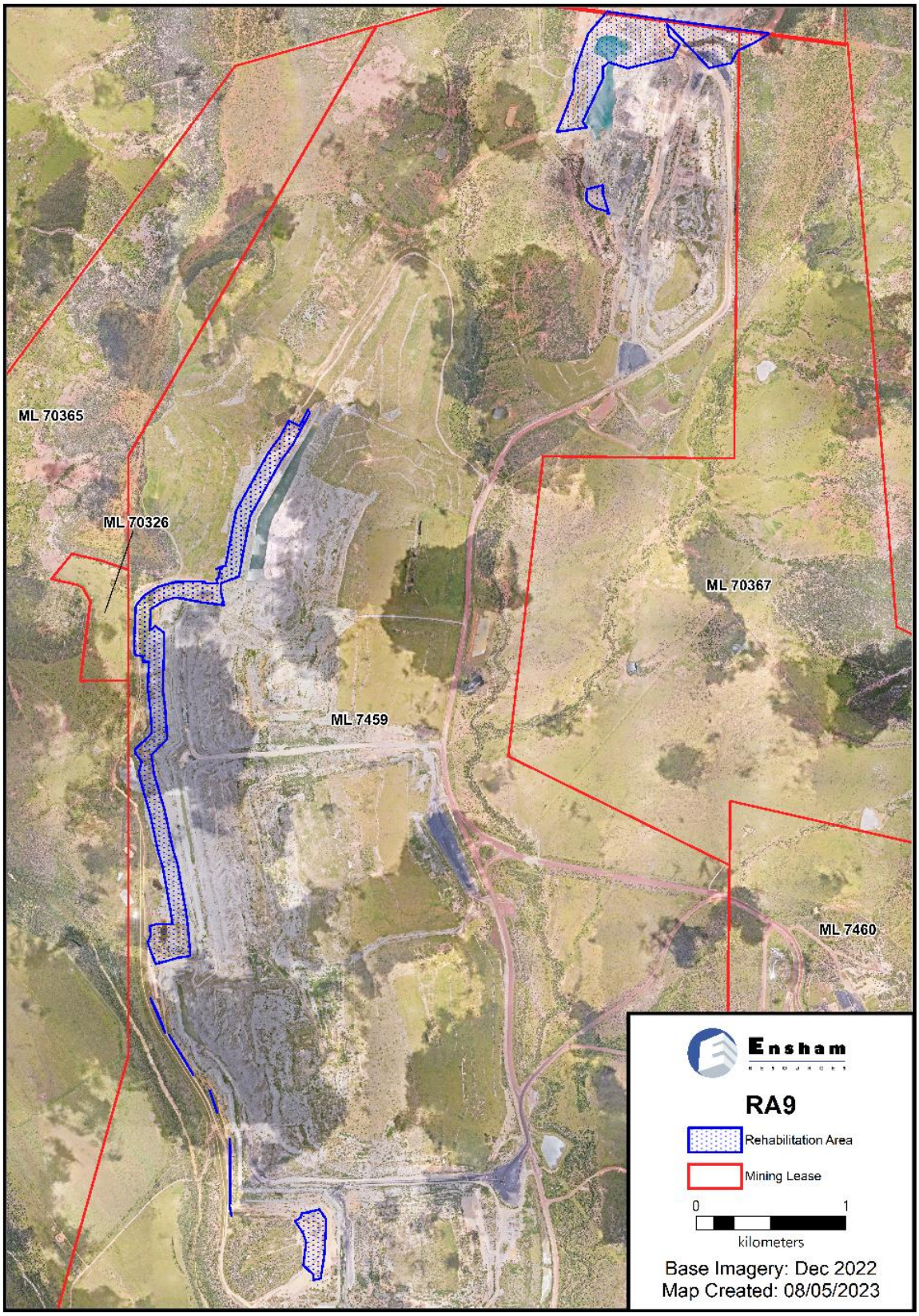
(RA8) Rehabilitation area 8

Post-mining land uses (PMLU)																						
Rehabilitation area (description)	RA8 (Central Cattle Grazing)																					
Relevant activities	Mine domain 1 – Overburden / infrastructure areas, including overburden emplacement, low walls, stockpiles/lay downs, coal handling plant, rail loop, roads, mine industrial area (workshops, fuel farm, washdown etc), dams and surface disturbance associated with underground mining (Figure 9-16 Rehabilitation Area 8 (RA8))																					
Total rehabilitation area size (ha)	1140.8																					
Commencement of first milestone: RM3	1/01/2027																					
PMLU	Cattle grazing																					
Date area is available	1/01/27	1/01/29	1/01/30	1/01/31	1/01/32	1/01/33	10/12/34	1/01/35	1/01/36	1/01/37	1/01/38	1/01/39	1/01/40	1/01/41	1/01/42	1/01/43						
Cumulative area available (ha)	1.2	59.5	163.8	203.4	224.1	224.1	224.1	318.5	329.4	519.4	684.2	684.2	804.8	947.0	1030.4	1140.8						
Milestone completed by	10/12/28	10/12/29	10/12/30	10/12/31	10/12/32	10/12/33	10/12/34	10/12/35	10/12/36	10/12/37	10/12/38	10/12/39	10/12/40	10/12/41	10/12/42	10/12/43	10/12/44	10/12/45	10/12/46	10/12/47	10/12/48	10/12/49
Milestone Reference	**Cumulative area achieved (ha)**																					
RM1																1140.8						
RM2																5						
RM3	1.2	59.5	163.8	203.4	224.1			318.5	329.4	519.4	684.2		804.8	947	1030.4	1140.8						
RM4	1.2		59.5	163.8	203.4	224.1			318.5	329.4	519.4	684.2		804.8	947	1140.8						
RM5	1.2		59.5	163.8	203.4	224.1			318.5	329.4	519.4	684.2		804.8	947	1140.8						
RM6			1.2		59.5	163.8	203.4	224.1			318.5	329.4	519.4	684.2		804.8	947	1030.4	1140.8			
RM7						1.2		59.5	163.8	203.4	224.1			318.5	329.4	519.4	684.2		804.8	947	1030.4	1140.8


ML 70326
ML 70367
ML 7460
ML 7459
Ensham
RA8
Rehabilitation Area
Mining Lease
0
1.5
kilometers
Base Imagery: Dec 2022
Map Created: 08/05/2023

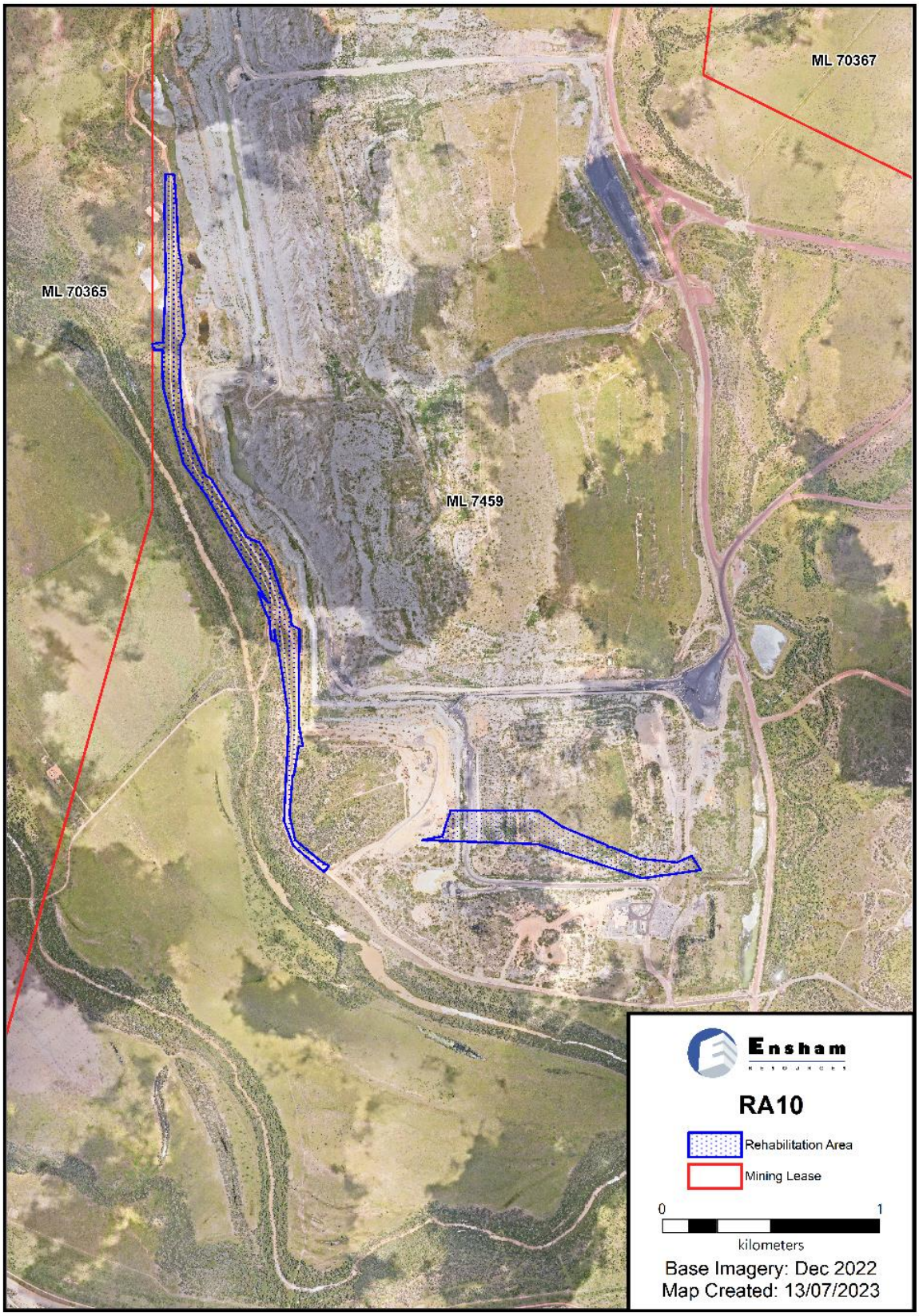
(RA9) Rehabilitation area 9

Post-mining land uses (PMLU)																	
Rehabilitation area (description)	RA9 (Central Native Bushland Corridor)																
Relevant activities	Mine domain 3 – Overburden emplacement areas and highwalls (Figure 9-17 Rehabilitation Area 9 (RA9))																
Total rehabilitation area size (ha)	92.1																
Commencement of first milestone: RM3	1/01/2027																
PMLU	Native bushland corridor																
Date area is available	1/01/27	1/01/30	1/01/31	1/01/32	1/01/34	1/01/35	1/01/36	1/01/37	1/01/38	1/01/39	1/01/40						
Cumulative area available (ha)	2.8	28.0	29.6	29.6	29.6	41.6	63.9	63.9	77.8	77.8	92.1						
Milestone completed by	10/12/28	10/12/30	10/12/31	10/12/32	10/12/34	10/12/35	10/12/36	10/12/37	10/12/38	10/12/39	10/12/40	10/12/41	10/12/42	10/12/43	10/12/44	10/12/45	10/12/47
Milestone Reference	**Cumulative area achieved (ha)**																
RM3	2.8	28	29.6			41.6	63.9		77.8		92.1						
RM4	2.8		28	29.6			41.6	63.9		77.8		92.1					
RM5	2.8		28	29.6			41.6	63.9		77.8		92.1					
RM6			2.8		28	29.6				41.6	63.9		77.8		92.1		
RM10					2.8			28	29.6				41.6	63.9		77.8	92.1


ML 70365
ML 70326
ML 70367
ML 7459
ML 7460
Ensham
RA9
Rehabilitation Area
Mining Lease
0
1
kilometers
Base Imagery: Dec 2022
Map Created: 08/05/2023

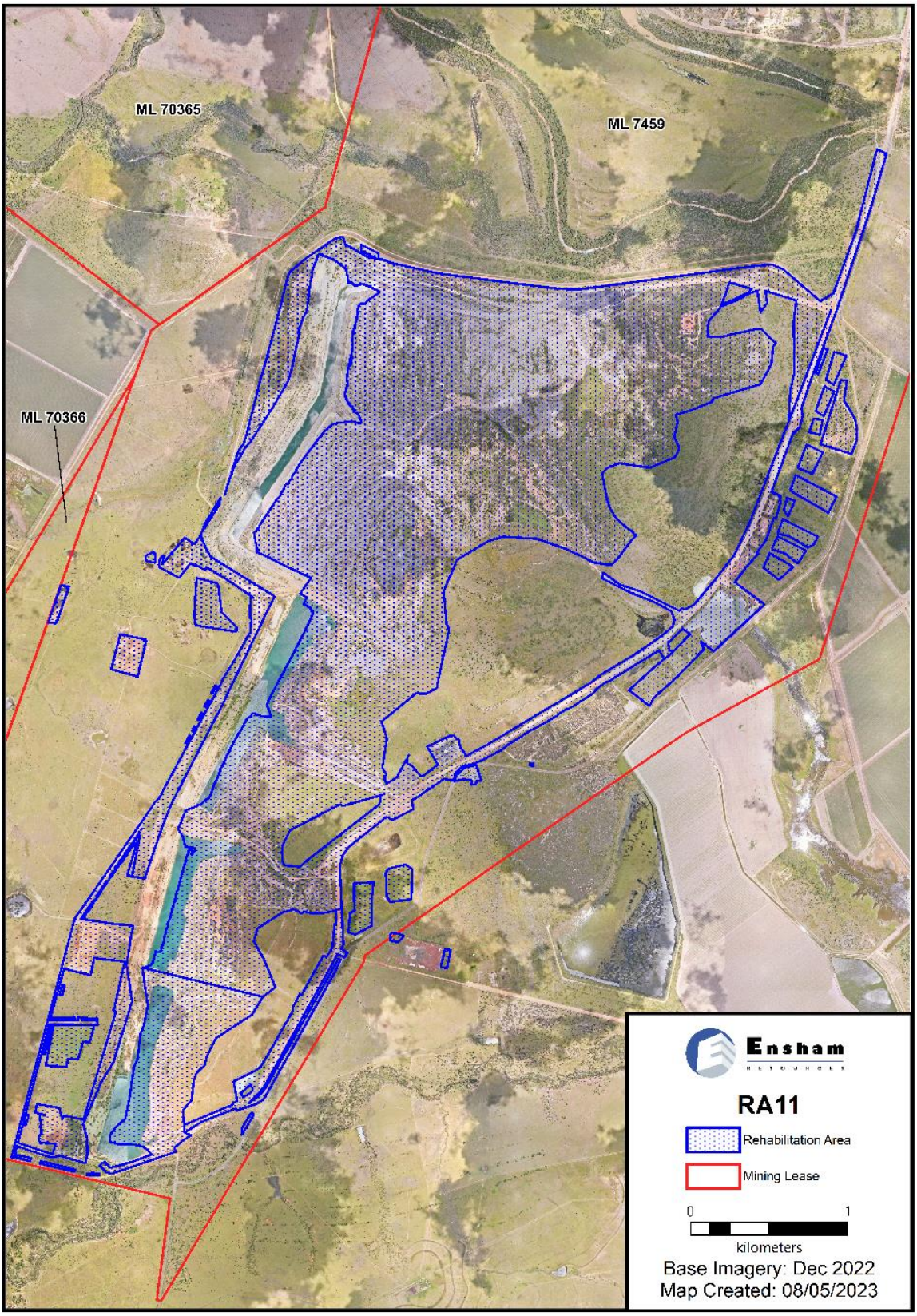
(RA10) Rehabilitation area 10

Post-mining land uses (PMLU)										
Rehabilitation area (description)	RA10 (Central Levee)									
Relevant activities	Mine domain 7 - Flood protection landform constructed over existing levee and overburden emplacement areas (Figure 9-18 Rehabilitation Area 10 (RA10))									
Total rehabilitation area size (ha)	35.7									
Commencement of first milestone: RM3	1/01/2038									
PMLU	Flood protection landform									
Date area is available	1/01/38	1/01/40	1/01/41	1/01/42						
Cumulative area available (ha)	8.5	22.7	33.7	35.7						
Milestone completed by	10/12/39	10/12/40	10/12/41	10/12/42	10/12/43	10/12/44	10/12/45	10/12/46	10/12/47	10/12/48
Milestone Reference	**Cumulative area achieved (ha)**									
RM3	8.5	22.7	33.7	35.7						
RM4	8.5		22.7	33.7	35.7					
RM5	8.5		22.7	33.7	35.7					
RM6			8.5		22.7	33.7	35.7			
RM11						8.5		22.7	33.7	35.7


ML 70367
ML 70365
ML 7459
Ensham
RA10
Rehabilitation Area
Mining Lease
0
1
kilometers
Base Imagery: Dec 2022
Map Created: 13/07/2023

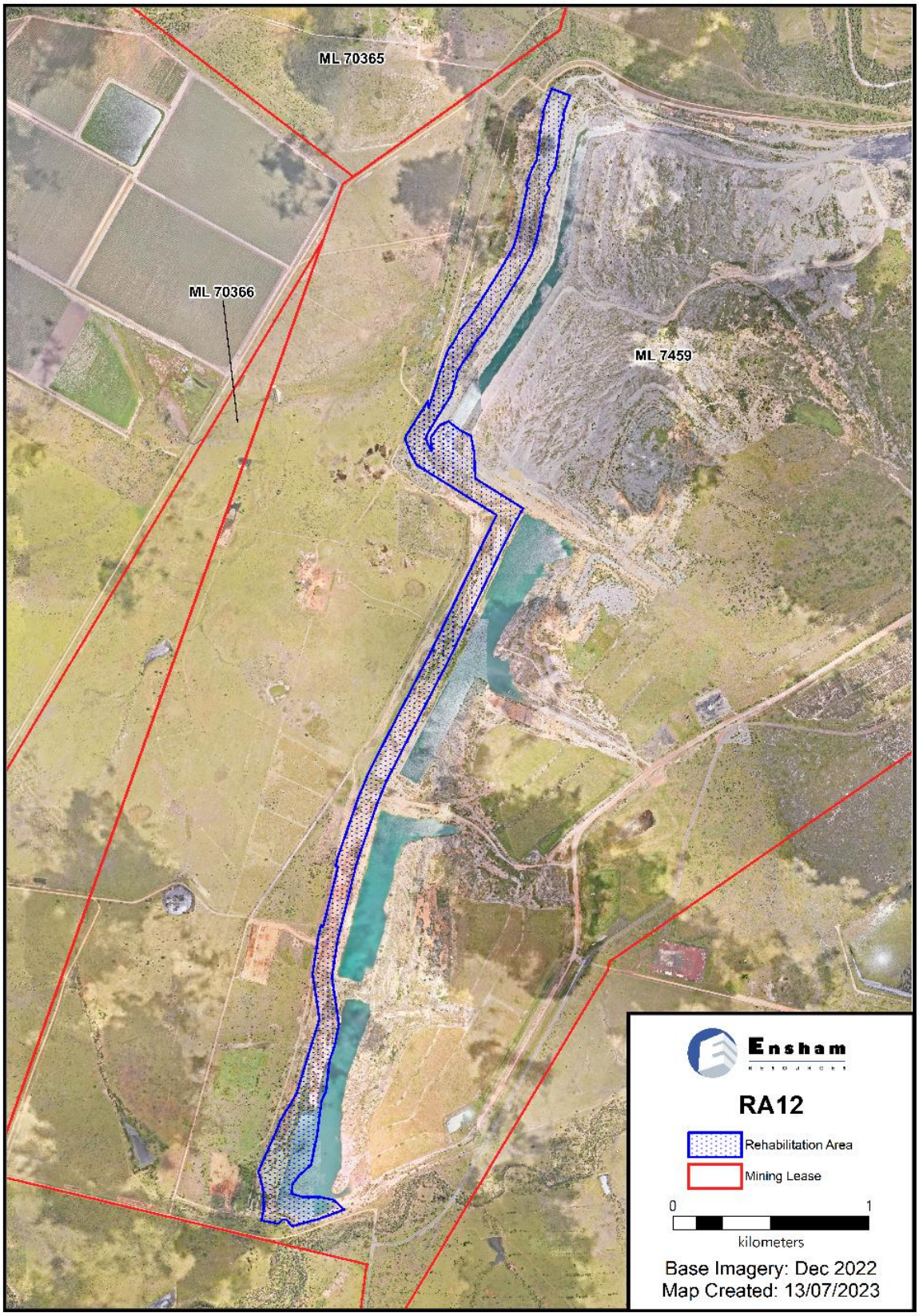
(RA11) Rehabilitation area 11

Post-mining land uses (PMLU)																	
Rehabilitation area (description)	RA11 (Southern Cattle Grazing)																
Relevant activities	Mine domain 1 – Overburden / infrastructure areas, including overburden emplacement areas, low walls, highwalls, mine infrastructure areas, stockpiles/laydowns, roads and dams (Figure 9-19 Rehabilitation Area 11 (RA11))																
Total rehabilitation area size (ha)	925.9																
Commencement of first milestone: RM3	1/01/2028																
PMLU	Cattle grazing																
Date area is available	1/01/28	1/01/31	1/01/32	1/01/33	1/01/34	1/01/35	1/01/36	1/01/37	1/01/38	1/01/39	1/01/40	1/01/41	1/01/42	1/01/43			
Cumulative area available (ha)	71.7	116.7	315.0	421.1	446.4	446.4	541.3	541.3	541.3	719.7	831.7	831.7	848.9	925.9			
Milestone completed by	10/12/29	10/12/31	10/12/32	10/12/33	10/12/34	10/12/35	10/12/36	10/12/37	10/12/38	10/12/39	10/12/40	10/12/41	10/12/42	10/12/43	10/12/45	10/12/46	10/12/48
Milestone Reference	**Cumulative area achieved (ha)**																
RM1														925.9			
RM2														3			
RM3	71.7	116.7	315	421.1	446.4		541.3			719.7	831.7		848.9	925.9			
RM4	71.7		116.7	315	421.1	446.4		541.3			719.7	831.7		925.9			
RM5	71.7		116.7	315	421.1	446.4		541.3			719.7	831.7		925.9			
RM6		71.7			116.7	315	421.1	446.4		541.3			719.7	831.7	925.9		
RM7					71.7			116.7	315	421.1	446.4		541.3		719.7	831.7	925.9


ML 70365
ML 7459
ML 70366
Ensham
RESOURCES
RA11
Rehabilitation Area
Mining Lease
0
1
kilometers
Base Imagery: Dec 2022
Map Created: 08/05/2023

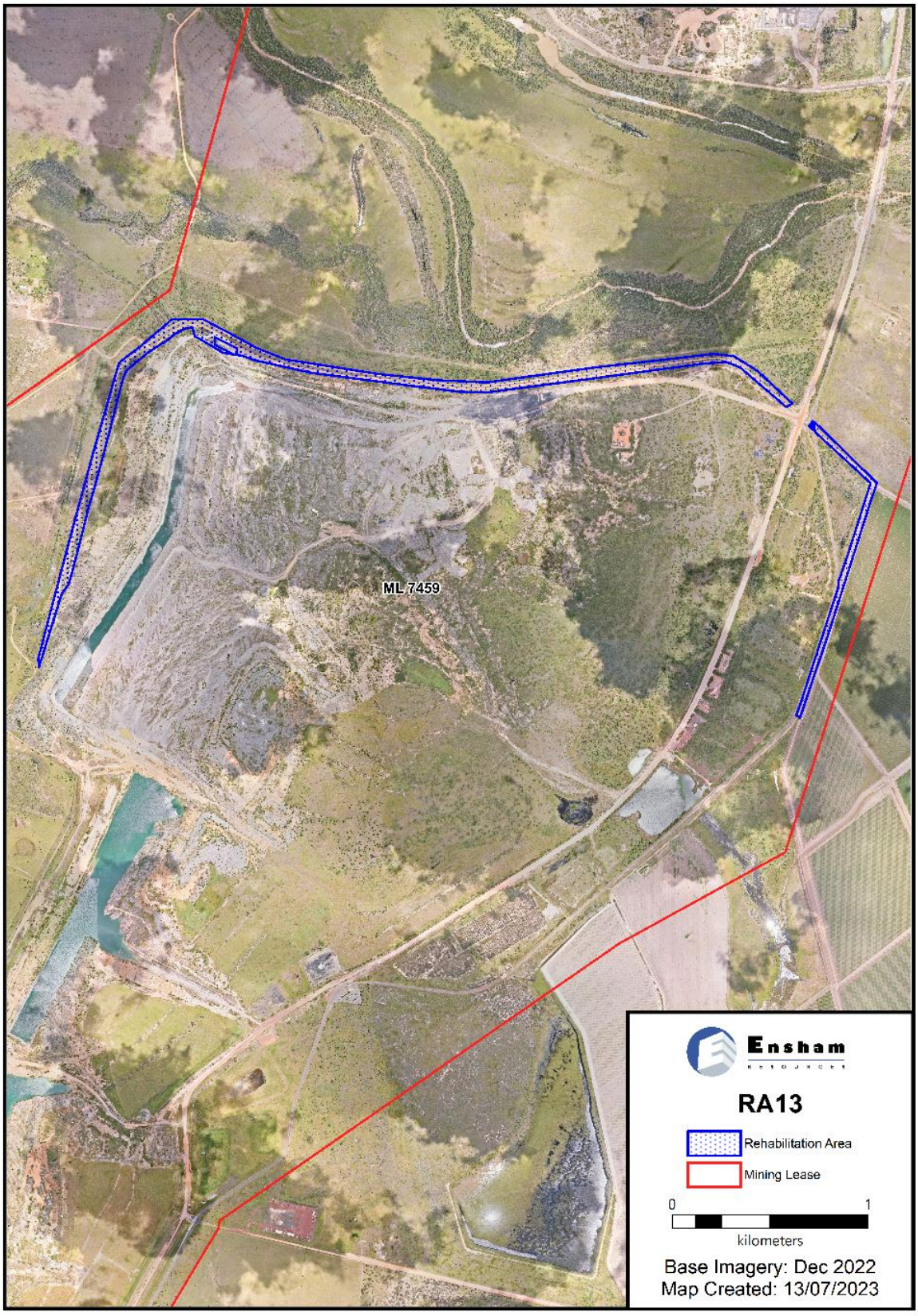
(RA12) Rehabilitation area 12

Post-mining land uses (PMLU)									
Rehabilitation area (description)	RA12 (Southern Native Bushland Corridor)								
Relevant activities	Mine domain 3 – Overburden emplacement areas and highwalls (Figure 9-20 Rehabilitation Area 12 (RA12))								
Total rehabilitation area size (ha)	76.2								
Commencement of first milestone: RM3	1/01/2034								
PMLU	Native bushland corridor								
Date area is available	1/01/34	1/01/36	1/01/37	1/01/38	1/01/39				
Cumulative area available (ha)	29.4	51.2	51.2	51.2	76.2				
Milestone completed by	10/12/35	10/12/36	10/12/37	10/12/38	10/12/39	10/12/40	10/12/41	10/12/43	10/12/46
Milestone Reference	**Cumulative area achieved (ha)**								
RM3	29.4	51.2			76.2				
RM4	29.4		51.2			76.2			
RM5	29.4		51.2			76.2			
RM6				29.4		51.2		76.2	
RM10							29.4	51.2	76.2


ML 70365
ML 70366
ML 7459
Ensham
RA12
Rehabilitation Area
Mining Lease
0
1
kilometers
Base Imagery: Dec 2022
Map Created: 13/07/2023

(RA13) Rehabilitation area 13

Post-mining land uses (PMLU)																	
Rehabilitation area (description)	RA13 (Southern Levee)																
Relevant activities	Mine domain 7 - Flood protection landform constructed over existing levee (Figure 9-21 Rehabilitation Area 13 (RA13))																
Total rehabilitation area size (ha)	29.6																
Commencement of first milestone: RM3	1/01/2028																
PMLU	Flood protection landform																
Date area is available	1/01/28	1/01/31	1/01/32	1/01/33	1/01/34	1/01/35	1/01/36	1/01/37	1/01/38	1/01/39	1/01/40	1/01/42	1/01/43				
Cumulative area available (ha)	3.0	3.0	5.1	9.9	22.1	22.1	22.1	22.1	22.1	22.1	22.1	25.2	29.6				
Milestone completed by	10/12/29	10/12/31	10/12/32	10/12/33	10/12/34	10/12/35	10/12/36	10/12/37	10/12/38	10/12/39	10/12/40	10/12/42	10/12/43	10/12/45	10/12/46	10/12/48	10/12/49
Milestone Reference	**Cumulative area achieved (ha)**																
RM3	3		5.1	9.9	22.1							25.2	29.6				
RM4	3			5.1	9.9	22.1							29.6				
RM5	3			5.1	9.9	22.1							29.6				
RM6		3				5.1	9.9	22.1						25.2	29.6		
RM11					3				5.1	9.9	22.1					25.2	29.6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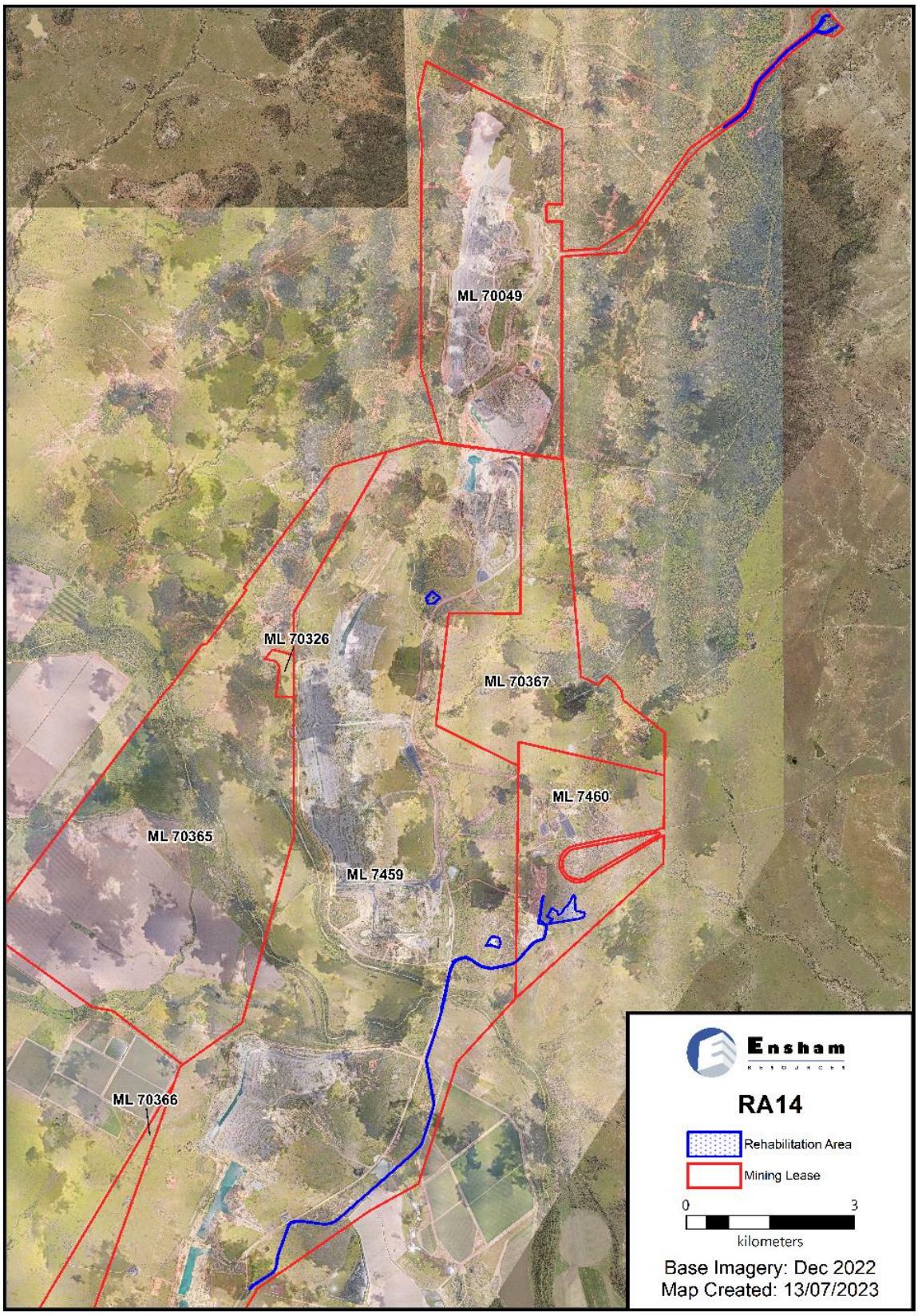
Ensham
RA13
Rehabilitation Area
Mining Lease
0
1
kilometers
Base Imagery: Dec 2022
Map Created: 13/07/2023

(RA14) Rehabilitation area 14

Post-mining land uses (PMLU)			
Rehabilitation area (description)			RA14 (Nogoa Pastoral and Simmons Infrastructure)
Relevant activities			Mine domain 2 – roads, bridge, powerlines, dams and associated water infrastructure (e.g. pipelines) (Figure 9-22 Rehabilitation Area 14 (RA14))
Total rehabilitation area size (ha)			38.5
Commencement of first milestone: RM8			1/01/2028
PMLU			Landholder retained infrastructure
Date area is available	1/01/28	1/01/43	
Cumulative area available (ha)	6.7	38.5	
Milestone completed by	10/12/28	10/12/43	
Milestone Reference	**Cumulative area achieved (ha)**		
RM8	6.7	38.5	


ML 70049
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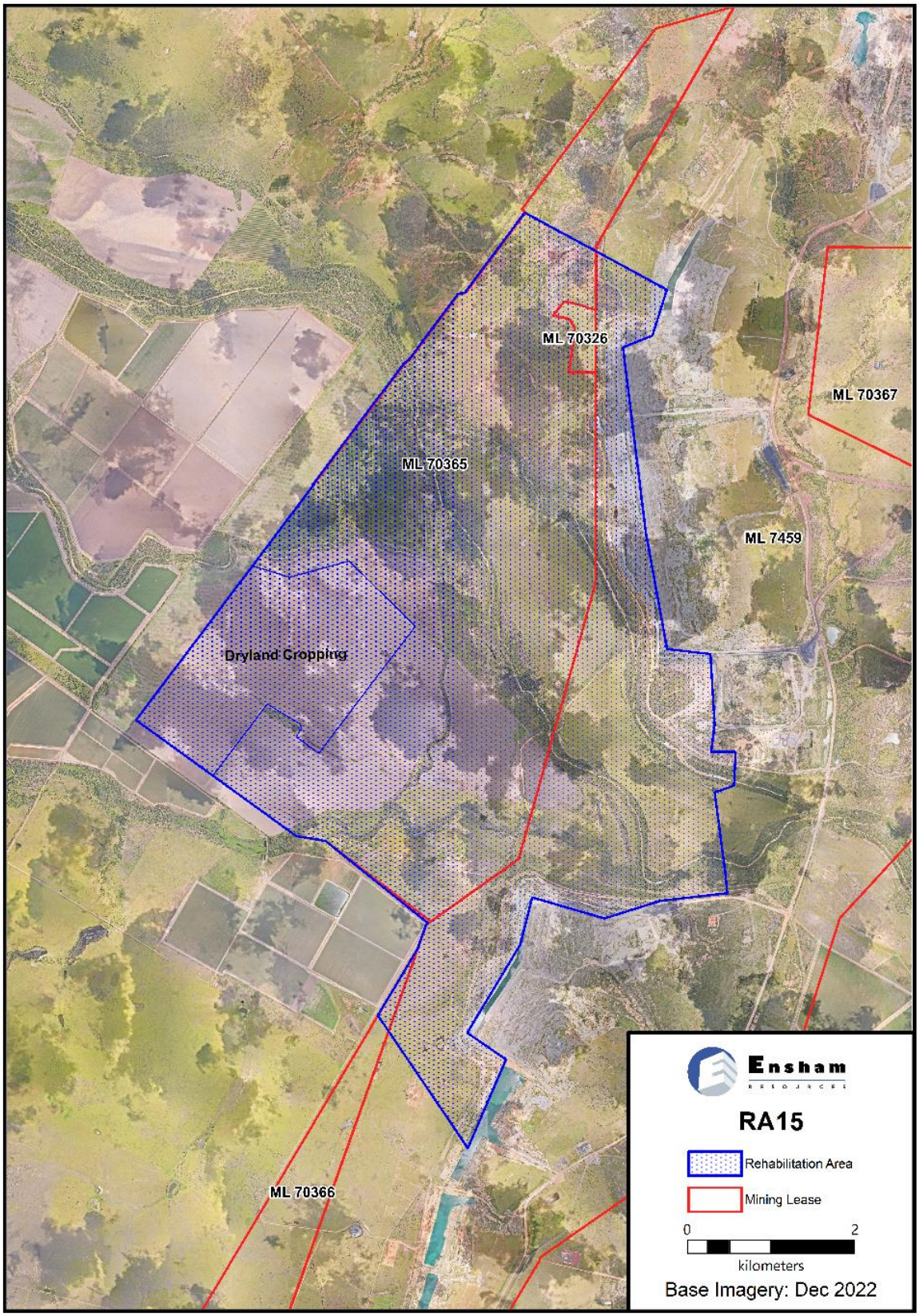
ML 70365
ML 7459
ML 70366
Ensham
RA14
Rehabilitation Area
Mining Lease
0
3
kilometers
Base Imagery: Dec 2022
Map Created: 13/07/2023

(RA15) Rehabilitation area 15

Post-mining land uses (PMLU)		
Rehabilitation area (description)	RA15 Surface Area of the Underground Mining Area	
Relevant activities	Underground Mining (Figure 9-23 Rehabilitation Area 15 (RA15))	
Total rehabilitation area size (ha)	3,770	
Commencement of first milestone: RM1	1/01/2038	
PMLU	Existing surface use, or RA PMLU or IA NUMA where applicable	
Date area is available	1/1/2038	
Cumulative area available (ha)	3,770	
Milestone completed by	10/12/43	
Milestone Reference	**Cumulative area achieved (ha)**	
RM1	3,770	
RM12	3,770	


ML 70326
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ML 70365
ML 7459
Dryland Cropping
ML 70366
Ensham
RESOURCES
RA15
Rehabilitation Area
Mining Lease
0
2
kilometers
Base Imagery: Dec 2022

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	1.1 All services disconnected, except that to be retained by landholder by formal written agreement. 1.2 All specific mining activity related buildings, plant and equipment and infrastructure* removed, except that to be retained by landholder by formal written agreement and with consent from the administering authority where the landholder or landowner is the EA holder. * all specific mining activity related buildings, plant and equipment and infrastructure does not include homesteads, sheds, cattle yards, tractors and all other agricultural buildings, plant, equipment and infrastructure that may be present.
RM2	Identification and remediation of contaminated land	2.1 Contaminated land assessment by an **AQP** [1] evidenced by preliminary site investigation and report. 2.2 Remediation or management of identified contaminated land completed, evidenced by site validation report and site suitability statement issued by the **AQP**. 2.3 Removal of land from Contaminated Land Register. 2.4 Removal of land from Environmental Management Land Register if feasible.
RM3	Final landform development	3.1 Permian material and rock to be placed preferentially on top part of landform profile as practicable, with more dispersive materials adequately buried. 3.2 Landform has been established and satisfies completion criteria for each PMLU below: Beef cattle grazing PMLU • All outward facing overburden slopes to achieve 0-10% slopes for Tertiary materials and 0-15% slopes for Permian materials, • 90% of the inward facing slopes achieving 0-10% slopes for Tertiary materials and 0-15% slopes for Permian materials, • Up to 10% of the inward facing slopes may include slopes between 15% to 25%, subject to these areas being fully contained within areas of 0-15% slopes • Landforms are assessed by an **AQP** as being geotechnically stable with a factor of safety ≥1.5. Native bushland corridor PMLU • Maximum 25% slope • Areas >15% to be assessed by an **AQP** as being stable long term, with rock mulch applied as required.

		Flood protection landform PMLU • Watercourse facing slopes ≤15%. • Void facing slopes ≤15%, except where constrained by proximity to void regrade, batters can be reduced to ≤25%. • Bench of 10m to separate inward toe embankment from adjacent edge of void stabilisation regrade. • Landform – 0.1%AEP +0.5m freeboard. • Line the river facing embankments at sharp changes in alignment where turbulence could occur with hard, durable rock rip rap. • Must be fenced to exclude stock and permanent fencing in place post construction and maintained. Boggy Creek Diversion PMLU • Geotechnically stable with a factor of safety ≥1.5 • As constructed drawings submitted to Department of Regional Development, Manufacturing and Water 3.3 Soil ameliorants and fertilisers are applied as needed to address spoil limitations. Partially Backfilled Void Areas 3.4 Pit A (south), Pits E, F and Y (Yongala) partially backfilled to above the equilibrium groundwater levels
RM4	Seedbed preparation	4.1 Soil assessment completed by an **AQP** to confirm quantity, quality, compatibility with rehabilitation methodology and PMLU, and guide amelioration of material. 4.2 The seedbed has been prepared for seeding and satisfies the below criteria for each applicable PMLU- Beef cattle grazing PMLU • Topsoil is placed at a minimum 150mm depth on all areas to be revegetated, or, where topsoil deficit exists, additional treatments have been applied as appropriate to generate a plant growth medium. • Soil ameliorants and fertilisers recommended by the soil assessment applied as needed to address soil and/or growth medium limitations. Native bushland corridor PMLU • Ameliorants and fertilisers are applied as needed to address plant growth medium limitations.

		Flood protection landform PMLU • Topsoil is to be a minimum 150mm depth on all areas to be revegetated, or, where topsoil deficit exists, additional treatments have been applied as appropriate to generate a plant growth medium. • Soil ameliorants and fertilisers recommended by the soil assessment applied as needed to address soil and/or growth medium limitations. Boggy Creek Diversion PMLU Seedbed preparation as per the Revegetation Plan supporting Water Licence 52699F: • Topsoil to be replaced on all areas to be revegetated. • Soil ameliorants and fertilisers recommended by the soil assessment applied as needed to address soil limitations.
RM5	Sowing	5.1 Seed sown and/or tubestock planted at appropriate rates as determined by an **AQP** for each PMLU- • Beef cattle grazing PMLU – 3P pasture species mix sown with a minimum of 4 perennial species sown. • Native bushland corridor PMLU – Native tree and shrub species mix sown to suit the regional ecosystem requirements. • Flood protection landform PMLU – Grass species sown. 5.2 Hay mulch applied as required and at a minimum 5t/ha, particularly on slopes >20%
RM6	Vegetation establishment	6.1 Vegetation has established and satisfies the below criteria for each applicable PMLU- Beef cattle grazing PMLU • ≥50% established and persistent vegetative groundcover for all slopes from 0-15%. • ≥80% established and persistent vegetative cover for slopes from 15% to 25%. • At least 4 perennial species established Native bushland corridor PMLU • ≥50% established and persistent ground cover (vegetative and/or rock mulch) for all slopes from 0-20%. • ≥80% established and persistent ground cover (vegetative and/or rock mulch) for slopes from 20% to 25%. Species richness composing of: • ≥ 2 tree species, • ≥ 3 shrub species, • ≥ 5 groundcover species from one or a combination of regional ecosystems from the list below:

		• 11.7.1 • 11.7.2 • 11.7.4 • 11.5.9 • 11.10.12 • 11.10.1 <u>Flood protection landform PMLU</u> • ≥50% established and persistent ground cover (vegetative and/or rock mulch) for all slopes <u>Boggy Creek Diversion PMLU</u> • ≥50% established and persistent ground cover (vegetative and/or rock mulch) for all vegetated slopes
RM7	Achievement of a stable condition (beef cattle grazing PMLU)	7.1 The RA is safe, with safety hazards in rehabilitation similar to surrounding unmined landscapes to meet 0 (zero) significant difference as defined in AS/NZS ISO 31000:2018 Risk Management. 7.2 There is no environmental harm being caused by anything on or in the RA. Surface water runoff is non-polluting to receiving waters and complies with the following- • pH 7.1 – 8.2 • EC (salinity) <403 µs/cm • Total Suspended Solids (TSS) (sediment loss) <405 mg/L • Arsenic ≤13 µg/L • Molybdenum ≤34 µg/L • Selenium ≤5 µg/L • Sulphate ($SO4^{2+}$) <16.34 mg/L 7.3 The RA can sustain the PMLU. • Assessment from an **AQP** that rehabilitation achieves land suitability class 2 to 4 as defined in the Guidelines for Agricultural Land Evaluation in Queensland (State Department of Queensland 2013). 7.4 Vegetation meets the following criteria: • ≥50% established and persistent vegetative groundcover for all slopes from 0-15%.

		• ≥80% established and persistent vegetative cover for slopes from 15% to 25% • At least 4 perennial species established 7.5 Assessment from an **AQP** that Pits A South, E, F & Y are backfilled above the modelled groundwater equilibrium levels and no daylighting of groundwater occurs.
RM8	Achievement of a stable condition (landholder retained infrastructure)	8.1 The RA is safe, with, safety hazards in rehabilitation similar to surrounding unmined landscapes to meet 0 (zero) significant difference as defined in AS/NZS ISO 31000:2018 Risk Management. 8.2 There is no environmental harm being caused by anything on or in the RA. Surface water runoff is non-polluting to receiving waters and complies with the following- • pH 7.1 – 8.2 • EC (salinity) <403 µs/cm • Total Suspended Solids (TSS) (sediment loss) <405 mg/L • Arsenic ≤13 µg/L • Molybdenum ≤34 µg/L • Selenium ≤5 µg/L • Sulphate ($SO4^{2+}$) <16.34 mg/L 8.3 Landholder formally accepts infrastructure for his/her ongoing beneficial use, with evidence of agreement provided for ownership transfer. Landholder accepts the condition of infrastructure, including its structural integrity through a legally binding agreement executed by each party. 8.4 For those areas where the landowner is the EA holder, the administering authority provides consent to the retainment of infrastructure, in accordance with EA conditions.
RM9	Achievement of a stable condition (Boggy Creek diversion)	9.1 The RA is safe, with. safety hazards in rehabilitation similar to surrounding unmined landscapes to meet 0 (zero) significant difference as defined in AS/NZS ISO 31000:2018 Risk Management. 9.2 There is no environmental harm being caused by anything on or in the RA. Surface water runoff is non-polluting to receiving waters and complies with the following- • pH 7.1 – 8.2

		• EC (salinity) <403 µs/cm • Total Suspended Solids (TSS) (sediment loss) <405 mg/L • Arsenic ≤13 µg/L • Molybdenum ≤34 µg/L • Selenium ≤5 µg/L • Sulphate ($SO4^{2+}$) <16.34 mg/L 9.3 Assessment by an **AQP** that the Diversion has an IDC score >10 as defined in Criteria for functioning river landscape units in mining and post-mining landscapes (ACARP Project number C20017).
RM10	Achievement of a stable condition (Native bushland corridor)	10.1 The RA is safe, with. safety hazards in rehabilitation similar to surrounding unmined landscapes to meet 0 (zero) significant difference as defined in AS/NZS ISO 31000:2018 Risk Management. 10.2 There is no environmental harm being caused by anything on or in the RA. Surface water runoff is non-polluting to receiving waters and complies with the following- • pH 7.1 – 8.2 • EC (salinity) <403 µs/cm • Total Suspended Solids (TSS) (sediment loss) <405 mg/L • Arsenic ≤13 µg/L • Molybdenum ≤34 µg/L • Selenium ≤5 µg/L • Sulphate ($SO4^{2+}$) <16.34 mg/L 10.3 The RA can sustain the desired PMLU. Assessment from an **AQP** that rehabilitation has native species and native bushland characteristics demonstrating native species richness including: • ≥2 tree species; • ≥3 shrub species; • ≥5 groundcover species from one or a combination of regional ecosystems from the list below: • 11.7.1

		• 11.7.2 • 11.7.4 • 11.5.9 • 11.10.12 • 11.10.1 and ground coverage meeting the below criteria: • ≥50% established and persistent ground cover (vegetative and/or rock mulch) for all slopes from 0-20%. • ≥80% established and persistent ground cover (vegetative and/or rock mulch) for slopes from 20% to 25%.
RM11	Achievement of a stable condition (Flood protection landform)	11.1 The RA is safe, with safety hazards in rehabilitation are similar to surrounding unmined landscapes to meet 0 (zero) significant difference as defined in AS/NZS ISO 31000:2018 Risk Management. 11.2 There is no environmental harm being caused by anything on or in the RA. Surface water runoff complies with the following- • pH 7.1 – 8.2 • EC (salinity) <403 µs/cm • Total Suspended Solids (TSS) (sediment loss) <405 mg/L • Arsenic ≤13 µg/L • Molybdenum ≤34 µg/L • Selenium ≤5 µg/L • Sulphate ($SO4^{2+}$) <16.34 mg/L 11.3 A permanent flood protection landform is in place, constructed as per certified designs provided under conditions of the EA, and assessed by an **AQP**. 11.4 Floodplain width re-instated with a minimum 2km width between the B Pit flood protection landform and the C Pit flood protection landform. 11.5 Exclusion of Stock – permanent fencing in place and maintained.

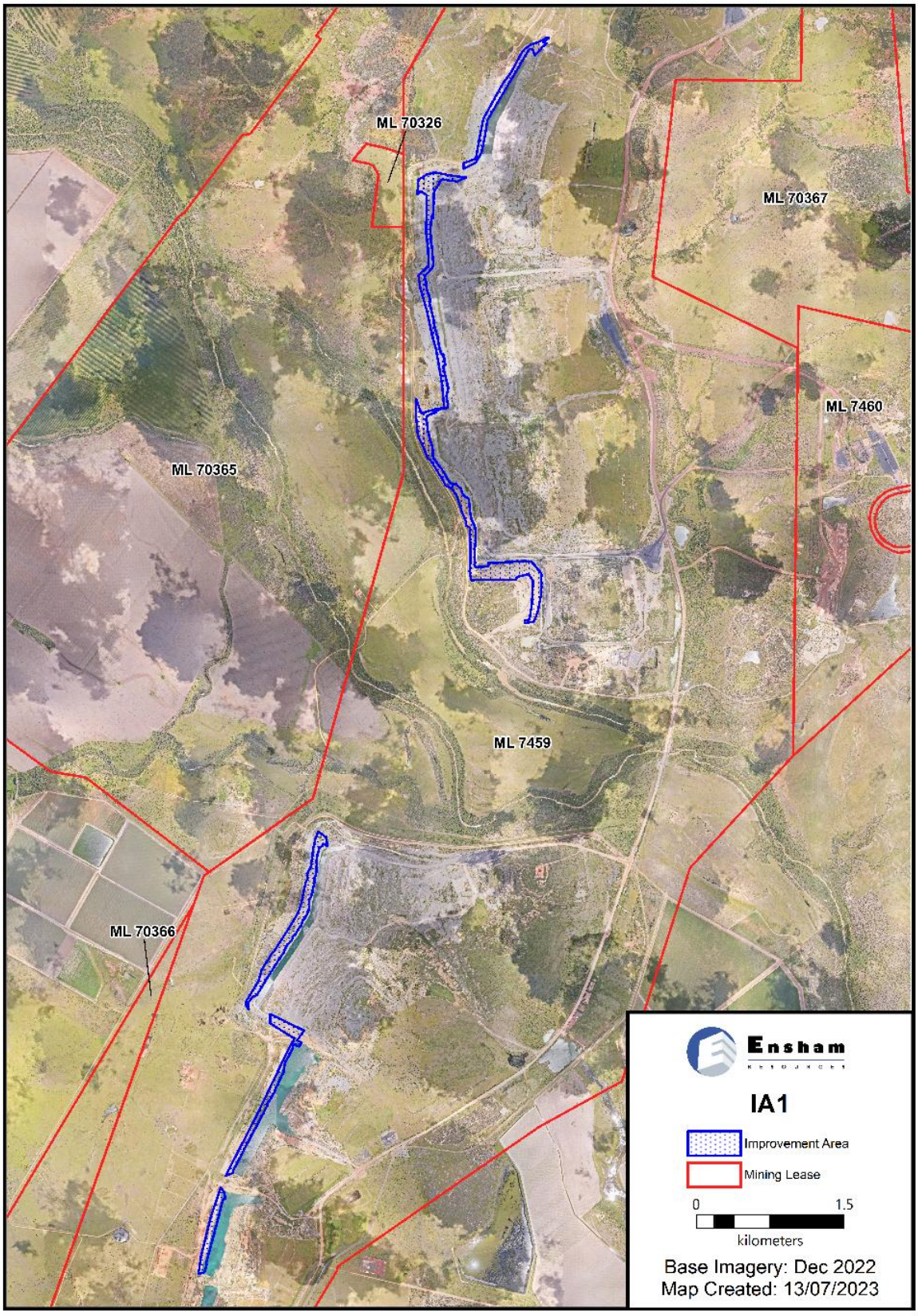
RM12	Achievement of a stable condition (Underground Mining Surface Areas - not applicable to underground workings)	12.1 Assessment by an **AQP** confirms: • Long-term stability of the underground mine layout with a minimum factor of safety of 1.6 under the Nogoa River floodplain, with the exception of a factor of safety of 2.11 under the Nogoa River and anabranch. • All life of mine seals meet the requirements dictated in the Coal Mining Health and Safety Regulation 2017, or a more current version. • The extent and frequency of surface cracking and ponding of the mined land is comparable to the unmined land. • Drainage features within the subsided areas is comparable with the pre-mining drainage features of the land as confirmed by a LiDAR Survey.

1. *Appropriately Qualified Person* (**AQP)** means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relating to the subject matter using the relevant protocols, standards, methods or literature.

Section D – Non-use management areas

(IA1) Improvement area 1

Non-use management area (NUMA)											
Improvement area (description)	IA1 (Highwalls)										
Relevant activities	Mine domain 6 – A Central, A North, B, C, D & E Pit Highwalls (Figure 9-24 Improvement Area 1 (IA 01))										
Total size (ha)	83.1										
Commencement of first milestone: MM1	1/01/2032										
NUMA	Highwalls										
Date area is available	1/01/32	1/01/36	1/01/37	1/01/38	1/01/40	1/01/41	1/01/42				
Cumulative area available (ha)	3.0	21.9	29.6	41.5	50.1	63.0	83.1				
Milestone completed by	10/12/32	10/12/36	10/12/37	10/12/38	10/12/40	10/12/41	10/12/42	10/12/43	10/12/45	10/12/46	10/12/47
Milestone Reference	**Cumulative area achieved (ha)**										
MM1	3.0	21.9	29.6	41.5	50.1	63	83.1				
MM2			3			21.9	29.6	41.5	50.1	63	83.1


ML 70326
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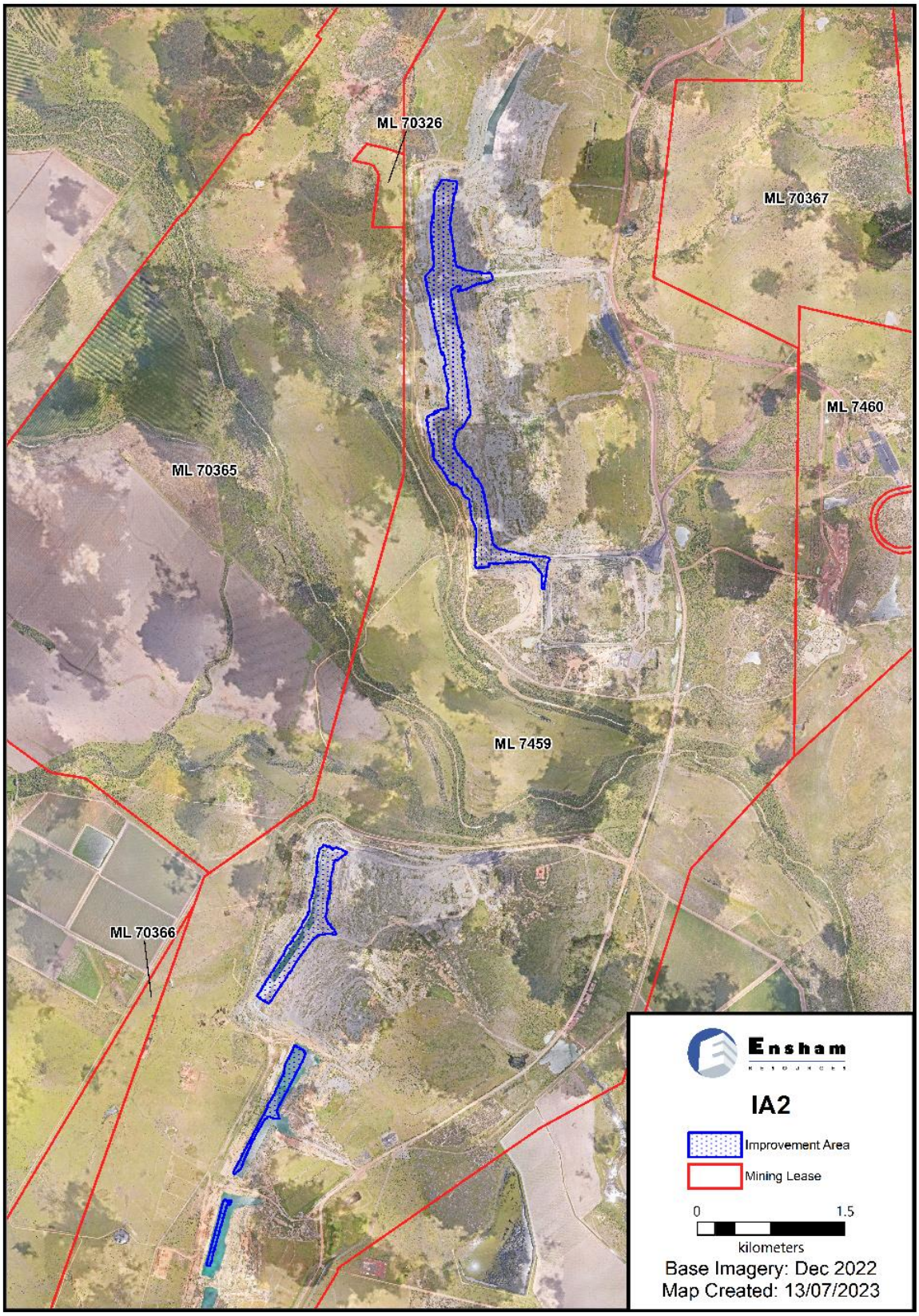
ML 70365
ML 7459
ML 70366
Ensham
IA1
Improvement Area
Mining Lease
0
1.5
kilometers
Base Imagery: Dec 2022
Map Created: 13/07/2023

(IA2) Improvement area 2

Non-use management area (NUMA)									
Improvement area (description)	IA2 (Groundwater Daylighting Areas)								
Relevant activities	Mine domain 5 - A Central, A North, B, C & D Pits Groundwater daylighting water areas (Figure 9 -25 Improvement Area 2 (IA 02))								
Total size (ha)	145.8								
Commencement of first milestone: MM1	1/01/2036								
NUMA	Groundwater daylighting water areas								
Date area is available	1/01/36	1/01/38	1/01/40	1/01/41	1/01/42				
Cumulative area available (ha)	30.7	65.7	98.1	112.4	145.8				
Milestone completed by	10/12/36	10/12/38	10/12/40	10/12/41	10/12/42	10/12/43	10/12/45	10/12/46	10/12/47
Milestone Reference	**Cumulative area achieved (ha)**								
MM1	30.7	65.7	98.1	112.4	145.8				
MM2				30.7		65.7	98.1	112.4	145.8


ML 70326
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Ensham
IA2
Improvement Area
Mining Lease
0
1.5
kilometers
Base Imagery: Dec 2022
Map Created: 13/07/2023

Improvement area milestones

Milestone reference	Management milestone	Milestone criteria
MM1	Sufficient improvements to ensure structural stability	Pits, A Central, A North, B, C, D & E highwalls meet the below criterion: <u>Highwalls</u> 1.1 Slope gradients achieved as follows: • Maximum of 275% slopes for competent high walls. • Maximum of 50% slopes for incompetent material. • Northern Endwall of B Pit maximum 15% slope 1.2 Landforms are assessed by an **RPEQ** as geotechnically and erosionally stable with a factor of safety ≥1.5 1.3 Water run-off from above the highwall is channelled to the groundwater daylighting water areas through design pathways.
MM2	Sufficient improvements to ensure safety and minimisation of environmental harm	<u>Highwalls</u> 2.1 Bunded, fenced and signed to exclude humans and stock. <u>Groundwater Daylighting Areas</u> 2.2 Groundwater daylighting areas will not cause environmental harm outside of the mining leases relevant mining tenure boundary. 2.3 Assessment by an **AQP** that: • Groundwater daylighting areas act as groundwater sinks to the receiving groundwater environment.

		• Regional groundwater aquifers maintain their current water quality and groundwater monitoring bores do not exceed the water quality limits detailed in Table C11 – Groundwater quality limits in the relevant EA as a result of mining activities. 2.4 Maximum dimensions will not be exceeded for: • A Central – Surface Water Level -133mAHD, Water storage Volume -0.5GL, and Water Area – 3ha • A North – Surface Water Level – 133mAHD, Water storage volume – 1.2GL, and Water Area – 16ha • B – Surface Water Level – 123mAHD, Water Storage Volume – 3.1GL and Water Area – 33ha • C and D – Surface Water Level – 125mAHD, Water Storage Volume – 22.1GL and Water Areas – 65ha for C and 75ha for D 2.5 Fenced and signed to exclude humans and stock.

1. *Appropriately Qualified Person* (**AQP)** means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relating to the subject matter using the relevant protocols, standards, methods or literature.
2. *Registered Professional Engineer of Queensland* **(RPEQ)** means a person who is an RPEQ under the provisions of the *Professional Engineers Act 2002*, and has demonstrated competency and relevant experience for the nominated subject matter.

END OF PRCP SCHEDULE