

PRCP schedule

Environmental Protection Act 1994

PRCP schedule PRCP-EPML00731213-V1

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-EPML00731213-V1

PRCP schedule holder(s)

Name(s)	Registered address
MMG Dugald River Pty Ltd	Level 23, 28 Freshwater Place SOUTHBANK VIC 3006.

Location details

Location(s)
MDL79 ML2467 ML2468 ML2469 ML2470 ML2471 ML2477 ML2478 ML2479 ML2480 ML2481 ML2482 ML2496 ML2497 ML2498 ML2499 ML2500 ML2501 ML2502 ML2556 ML2557 ML2558 ML2559 ML2596 ML2599 ML2601 ML2638 ML2684 ML2685 ML7496 ML90047 ML90049 ML90050 ML90051 ML90211 ML90212 ML90213 ML90218 ML90220 ML90230 ML90237

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.



Signature

17/02/2023

Date

Chris Wake
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

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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).

PRCP schedule

The PRCP schedule incorporates the following sections:

- Section A - Conditions of PRCP schedule
- Section B - Final site design and reference maps
- Section C - Post mining land uses

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 Where land becomes available for rehabilitation earlier than the nominated 'Date area is available', progressive rehabilitation for that land must commence as soon as practicable. Progressive rehabilitation commenced early under this condition must be carried out in accordance with the milestones and criteria in this schedule, except that each of the dates by which milestones are to be completed is brought forward by the same amount of time as the commencement was 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* that achieves the relevant PMLU as indicated by Figure 1 Final Site Design.

PRCP5 Within 3 years of approval of the original PRCP Schedule the PRCP holder must commence field trials to demonstrate the construction and performance of the alternative cover system. The field trials must be established and maintained for a minimum of 5 consecutive years. The field trials must be carried out in accordance with the following requirements:

- a) The field trials may be located on another area of the tenure if the mine waste structures have not yet been constructed. The field trials must include multiple alternate cover systems, including the default high risk cover system specified in item #9.01 in Table of Values in the administering authority's ERC Calculator (ESR/2015/1824 Version 5) and the cover system proposed in the Rehabilitation Planning Part.
- b) The following information must be documented prior to commencement of any trials:
 - i) chemical and physical properties of material contained in the landform demonstrating it is representative of the mine waste
 - ii) chemical and physical properties of all cover materials

- iii) surface and sub-surface preparation requirements including the base/lining layer under the landform (for example, ripping, compacting, establishing bunds)
 - iv) amelioration requirements (for example, gypsum/lime etc, rate, spreading/layer application)
 - v) details of installation methodology
 - vi) monitoring equipment installation
 - vii) QA and QC tests and processes implemented for the construction of each layer of the alternate cover system.
- c) Prior to commencement of the trials, a planning report must be submitted to the administering authority that provides details as relevant for the matters above and also provides the following:
- i) specific objectives of the proposed design cover (i.e. reduction in surface water infiltration to a specified rate, prevention of salt rise that would impact on the establishment of vegetation)
 - ii) detailed design
 - iii) justification for the quality control and assurance processes that will be implemented for the construction of each layer of the alternate cover system
 - iv) lab-based material characterisation results.
- d) At a minimum, the following information must be collected during the course of the trial:
- i) Monitoring as per Section 8, INAP Global Cover System guideline (INAP 2017)
 - ii) Site specific climate data collected for the duration of the trial
 - iii) Data relating to surface conditions (biological and erosion monitoring)
 - iv) Data from in situ monitoring for:
 - (1) contaminant transport
 - (2) drainage performance
 - (3) evapotranspiration
 - (4) soil performance
 - (5) stability and biological factors.
- e) Following completion of the trial a completion report incorporating supporting data must be provided demonstrating the performance of all trialled cover systems. This report must provide details of the matters described above, in addition to the following:
- i) Demonstration that the proposed cover system will achieve a stable condition (pursuant to section 111A of the EP Act) and comply with criteria specified in this PRCP schedule.
 - ii) Updated Landform Evolution Modelling and infiltration modelling based on the results of the trial.
 - iii) Calibration processes for all instrumentation.
 - iv) SILO data for the duration of the trial period.
 - v) As constructed plans and report by an appropriately qualified person certifying that each cover system was constructed according to the design in the trial planning report.
 - vi) Destructive/non-destructive testing of each capping layer in the trial plot.
 - vii) In situ QA and QC test report for each capping layer.

- viii) QA and QC information for the overall landform construction.
- ix) Independent* certification from an appropriately qualified third party specifying the cover system for full scale application, based on the findings from the trial and including any necessary changes.
- x) Recommendations from an appropriately qualified person regarding the location of primary and secondary monitoring sites and the location of additional lysimeters referred to in RM7.

* Independent to the person/s who designed and installed the alternate capping system.

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

END OF CONDITIONS

Section B - Final site design and reference maps

1. Final site design and land use
2. Reference map
3. Rehabilitation Area Atlas Index
4. Rehabilitation Area Atlas Map 1
5. Rehabilitation Area Atlas Map 2
6. Rehabilitation Area Atlas Map 3
7. Rehabilitation Area Atlas Map 4
8. Rehabilitation Area Atlas Map 5
9. Rehabilitation Area Atlas Map 6
10. Rehabilitation Area Atlas Map 7

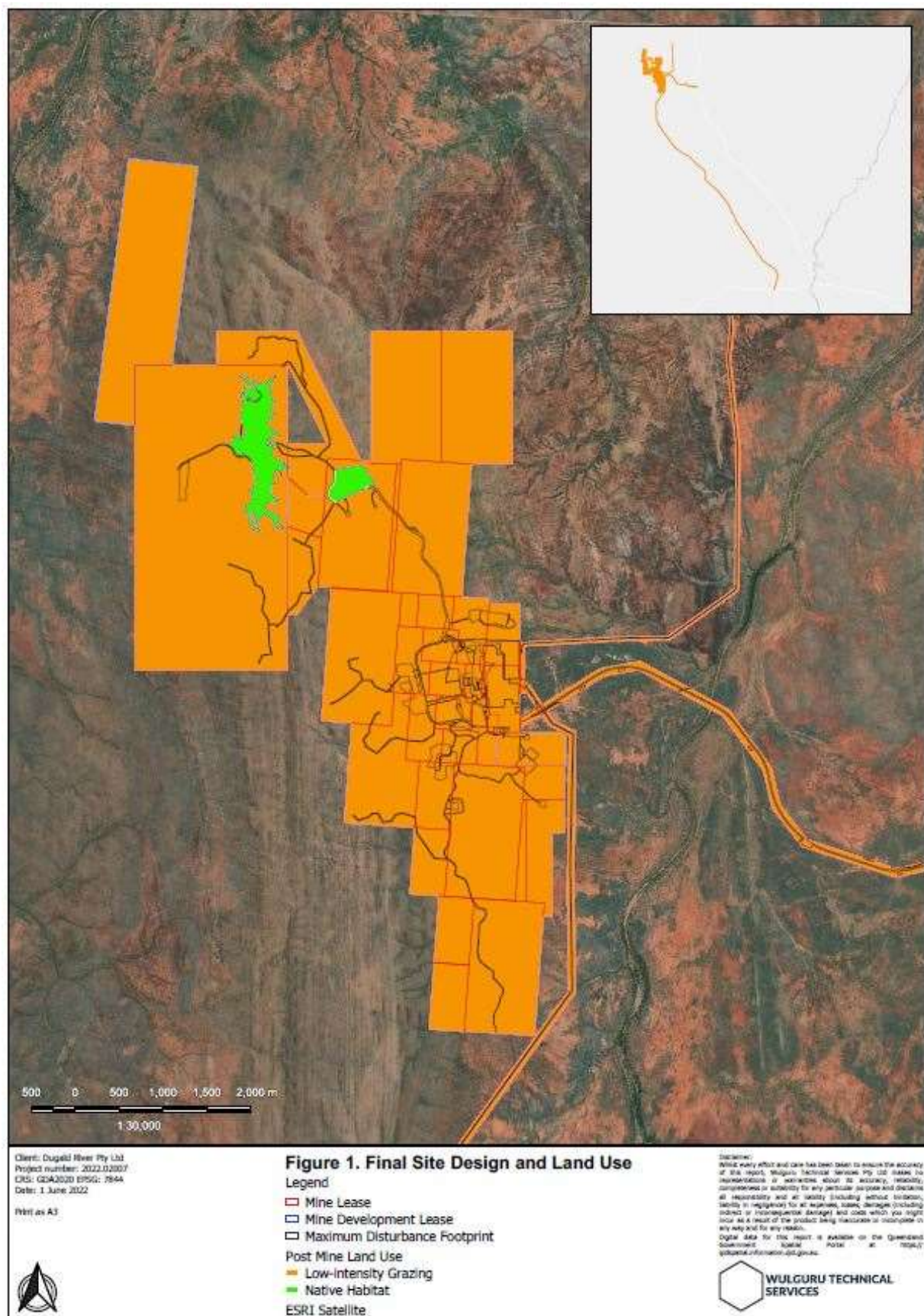


Figure 1. Final site design and land use

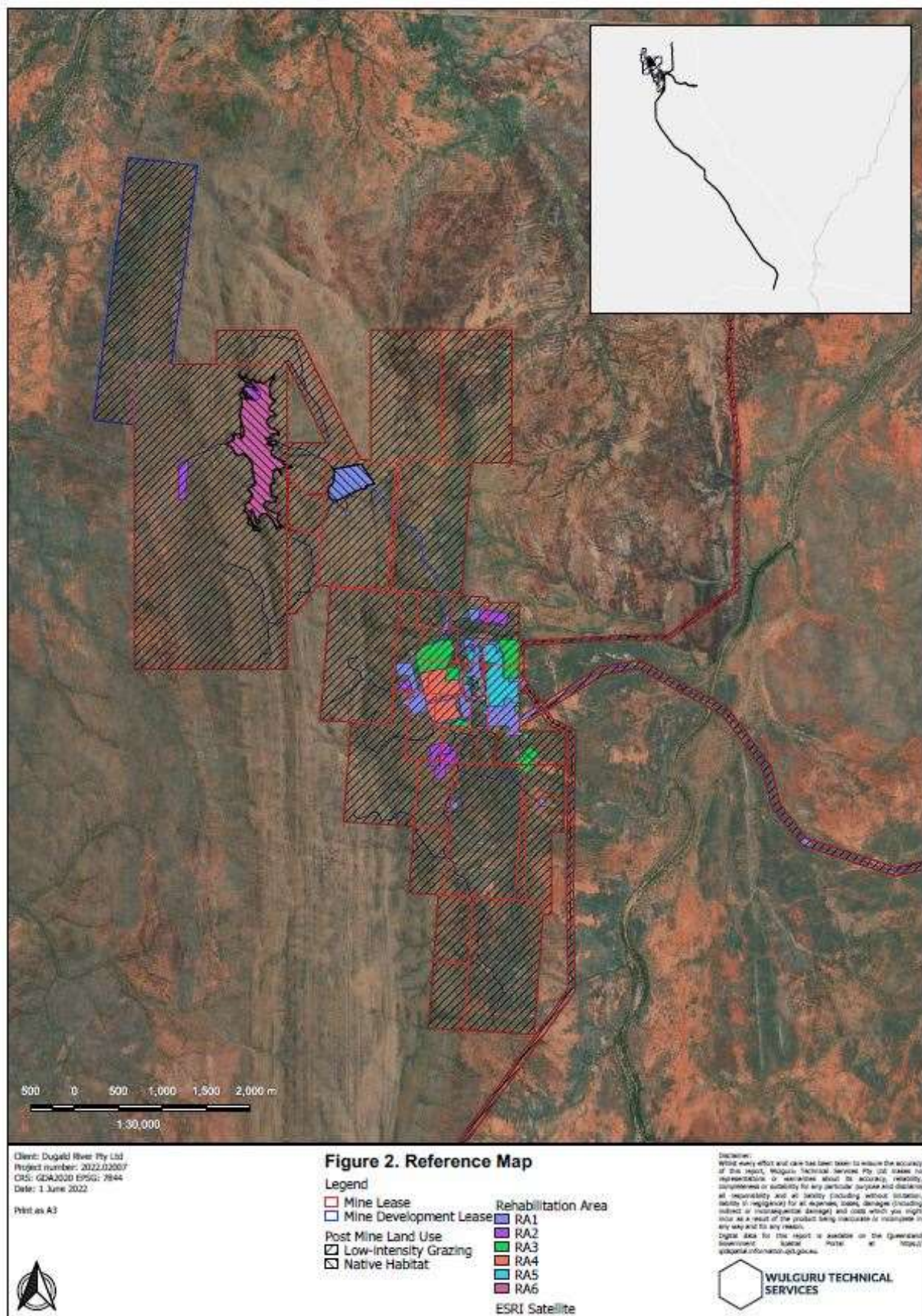


Figure 2. Reference map

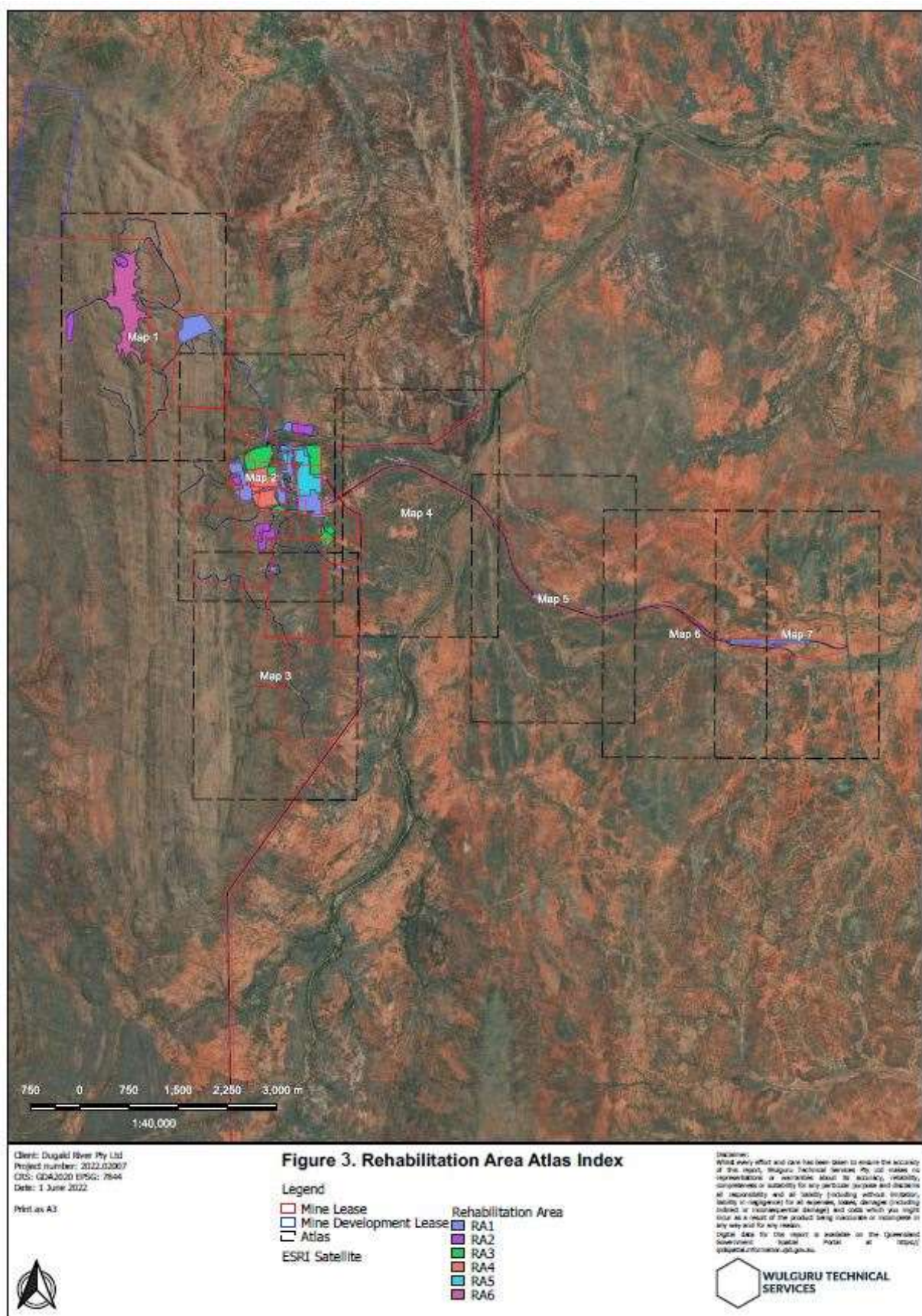


Figure 3. Rehabilitation Area Atlas Index

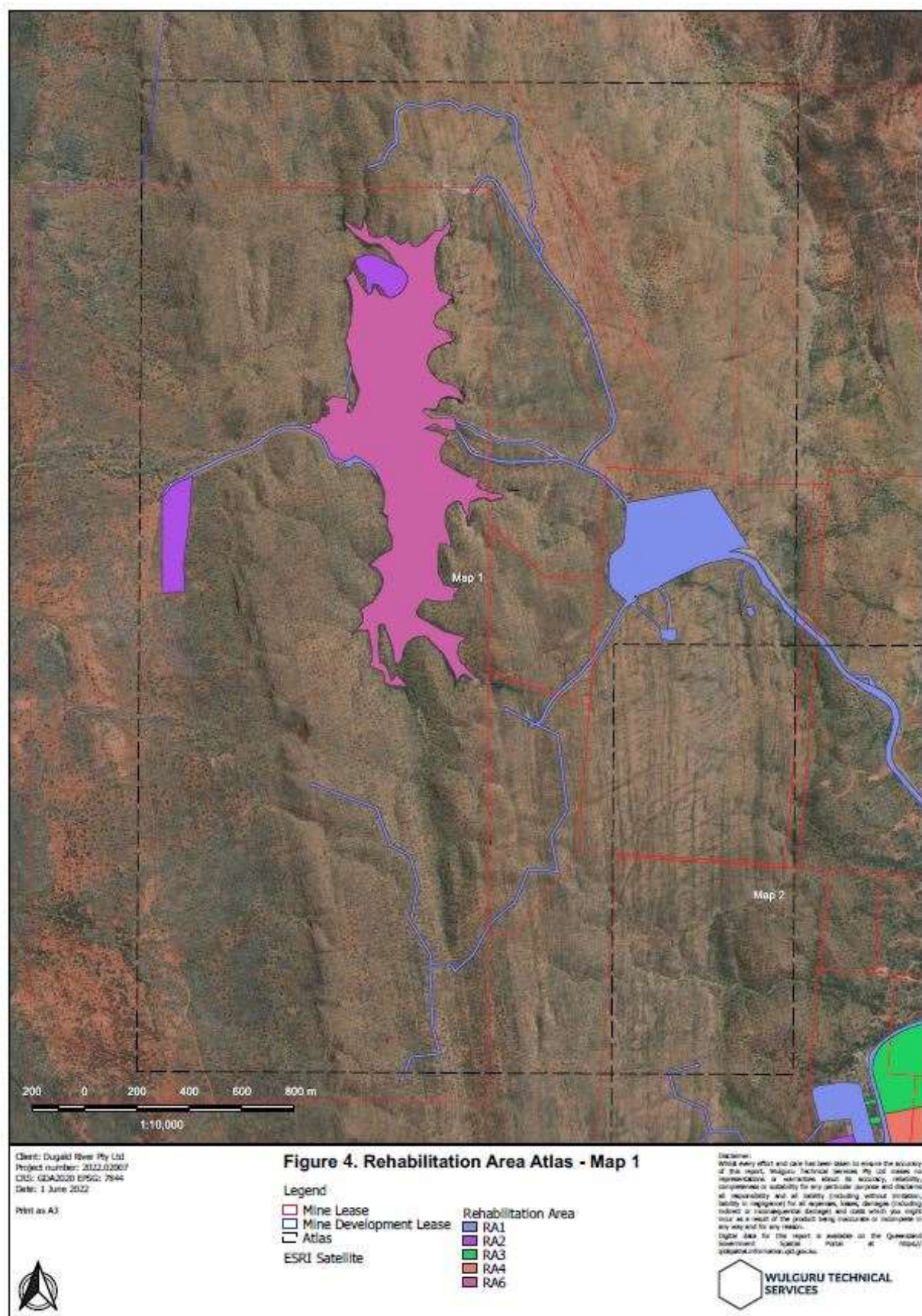


Figure 4. Rehabilitation Area Atlas Map 1

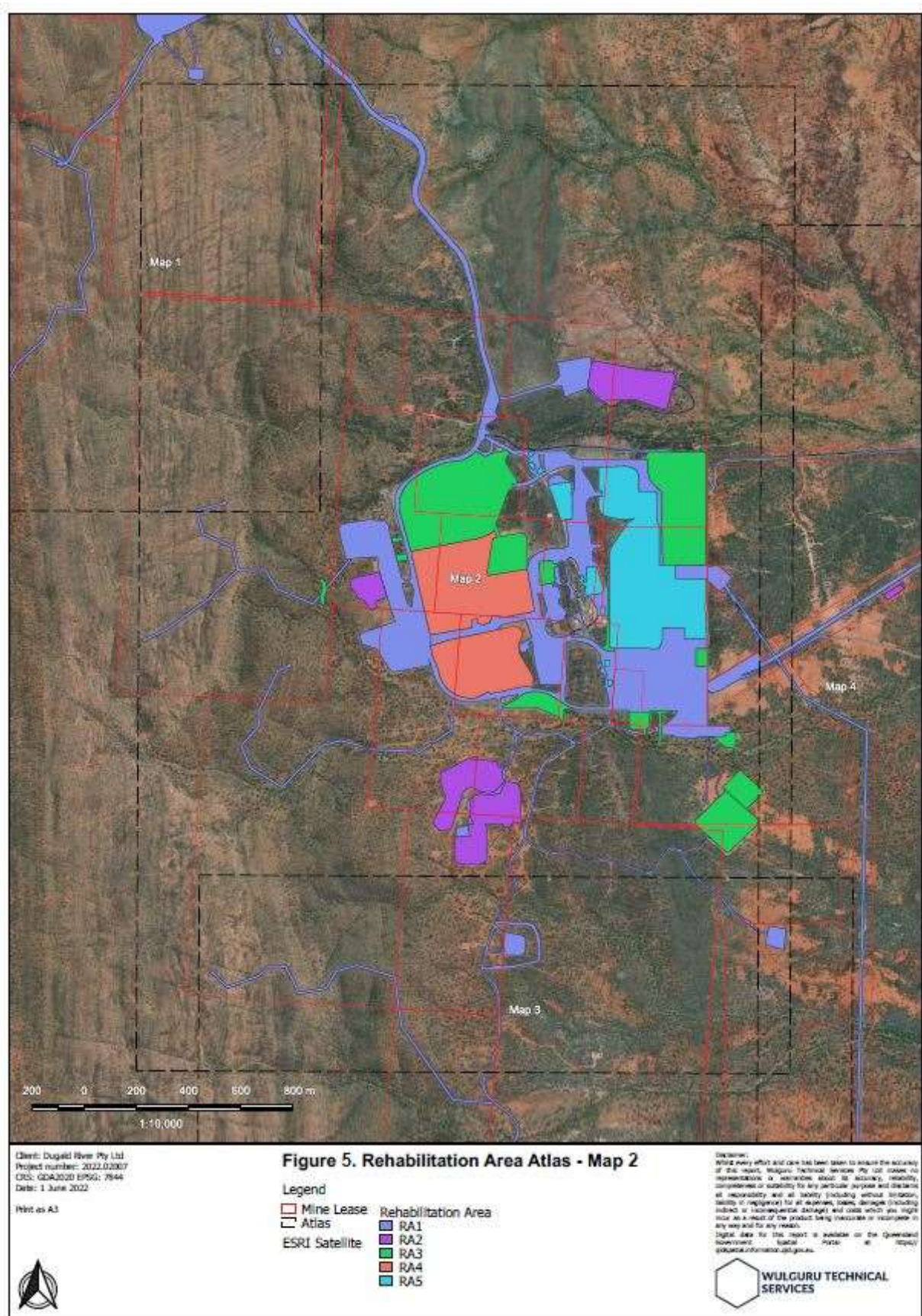


Figure 5. Rehabilitation Area Atlas Map 2

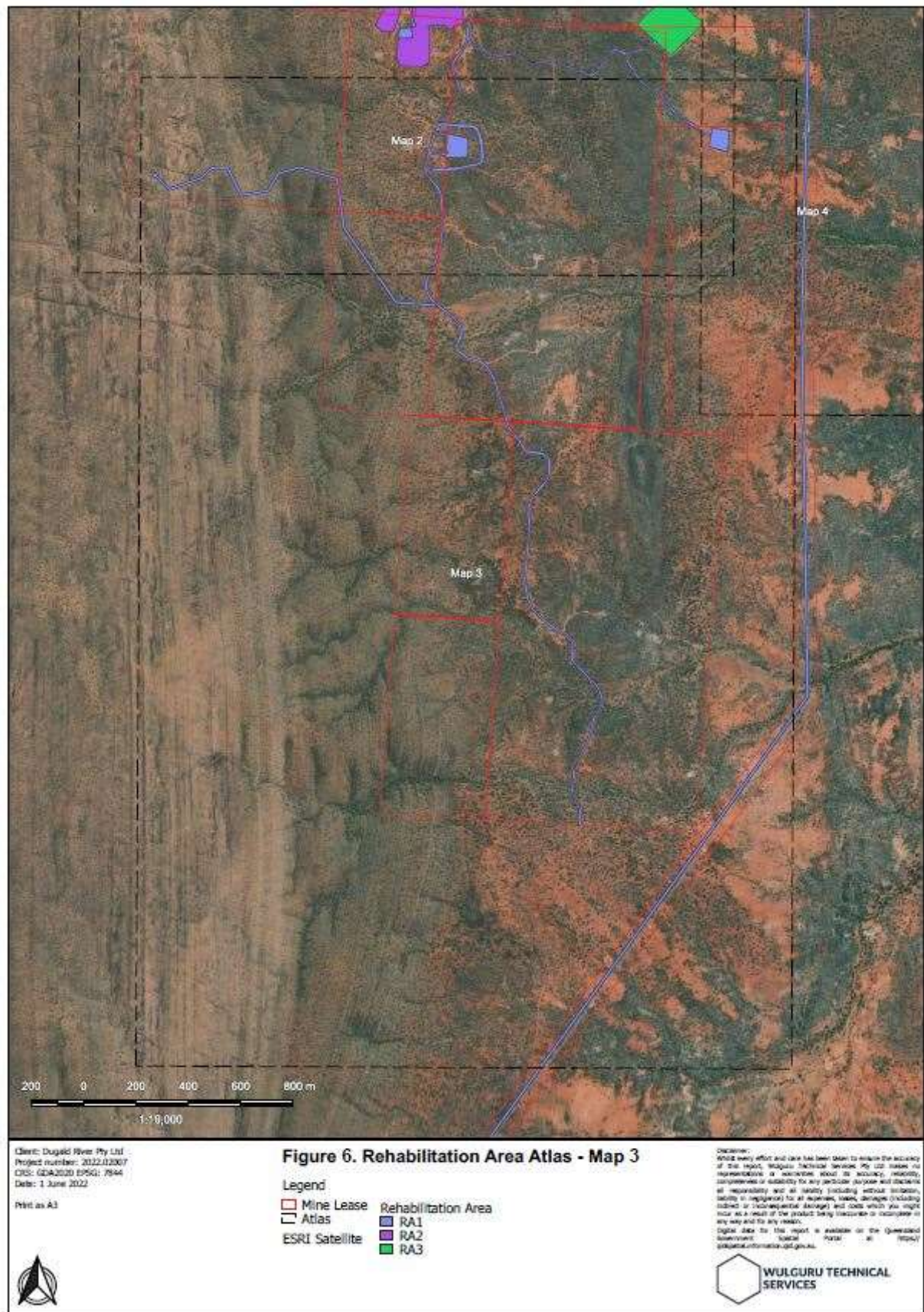


Figure 6. Rehabilitation Area Atlas Map 3



Figure 7. Rehabilitation Area Atlas Map 4

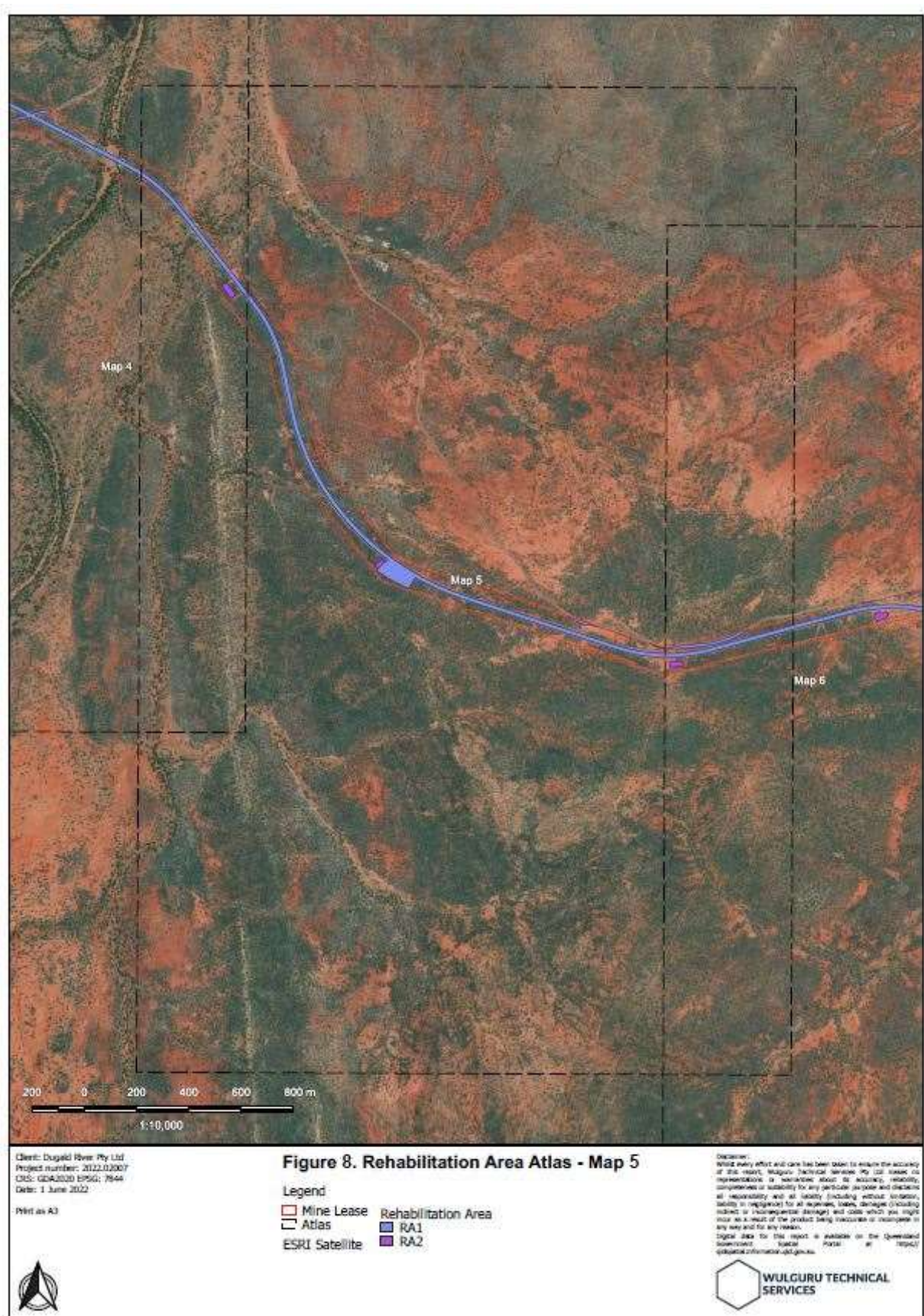


Figure 8. Rehabilitation Area Atlas Map 5

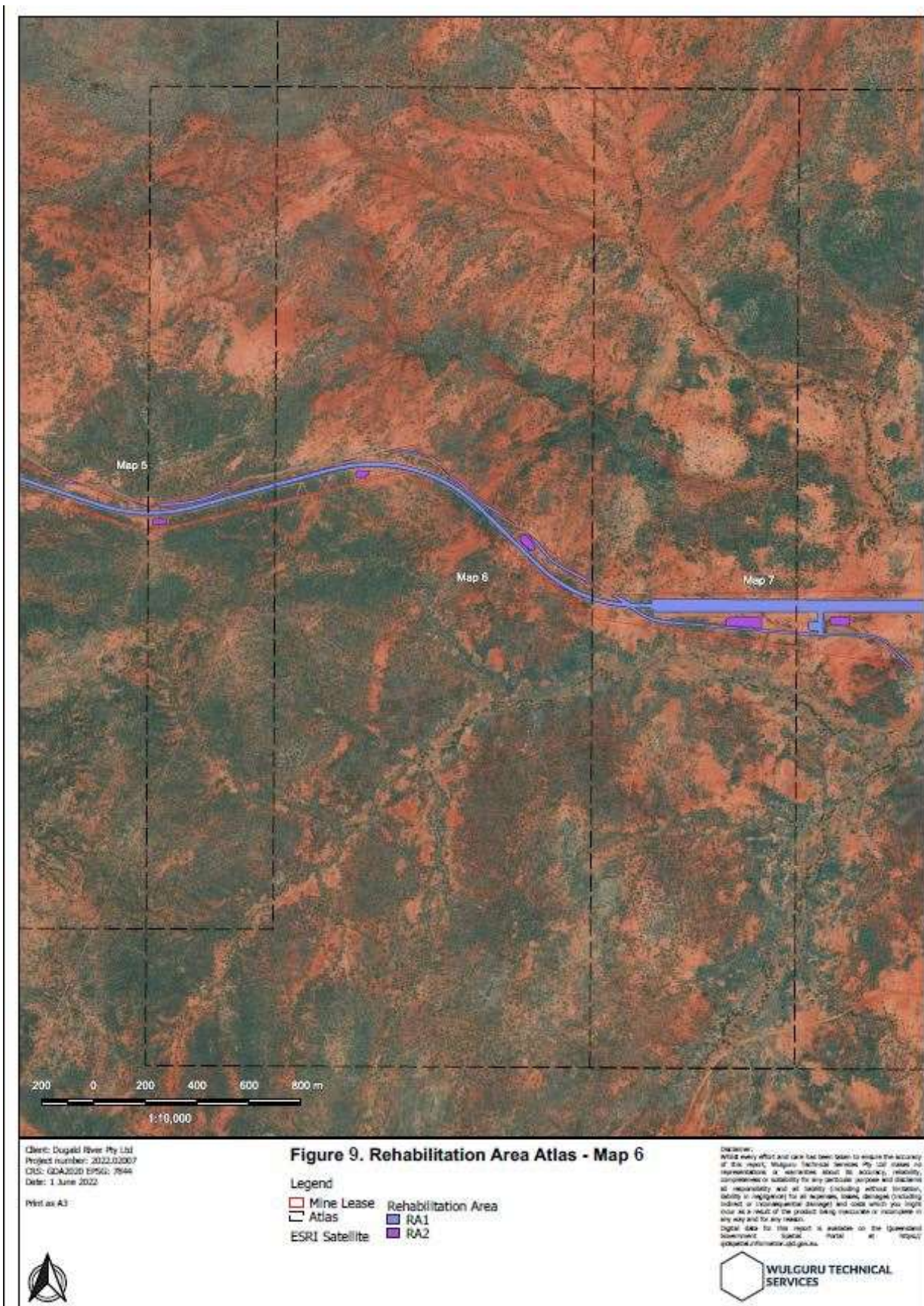


Figure 9. Rehabilitation Area Atlas Map 6



Figure 10. Rehabilitation Area Atlas Map 7

Section C – Post mining land uses

(RA1) Rehabilitation area 1

Post-mining land uses (PMLU)										
Rehabilitation area	RA1									
Relevant activities	Ancillary infrastructure and services									
Total rehabilitation area size (ha)	179.88									
Commencement of first milestone: RM1	10-Dec-48									
PMLU	Native ecosystem									
Date area is available	1/01/48	1/01/50	1/01/51	1/01/53	1/01/59	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	179.88	179.88	179.88	179.88	179.88					
Milestone completed by	10/12/49	10/12/50	10/12/52	10/12/58	10/12/65	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	Cumulative area achieved (ha)									
RM1	179.88									
RM2		179.88								
RM3		179.88								
RM8		179.88								
RM9			179.88							
RM11				179.88						
RM13					179.88					

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)										
Rehabilitation area	RA2									
Relevant activities	Borrow pits and stockpiles									
Total rehabilitation area size (ha)	21.71									
Commencement of first milestone: RM4	1-Jan-48									
PMLU	Low intensity grazing									
Date area is available	1/01/50	1/01/51	1/01/56	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	21.71	21.71	21.71							
Milestone completed by	10/12/50	10/12/55	10/12/60	10/12/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	Cumulative area achieved (ha)									
RM4	21.71									
RM8	21.71									
RM10	21.71									
RM12		21.71								
RM14			21.71							

(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)										
Rehabilitation area	RA3									
Relevant activities	Dams and diversion structures									
Total rehabilitation area size (ha)	31.63									
Commencement of first milestone: RM1	1-Jan-48									
PMLU	Low intensity grazing									
Date area is available	1/01/48	1/01/50	1/01/55	1/01/58	1/01/63	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	31.63	31.63	31.63	31.63	31.63					
Milestone completed by	10/12/49	10/12/54	10/12/57	10/12/62	10/12/67	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	Cumulative area achieved (ha)									
RM1	31.63									
RM2	31.63									
RM5		31.63								
RM8		31.63								
RM10			31.63							
RM12				31.63						
RM14					31.63					

(RA4) Rehabilitation area 4

Post-mining land uses (PMLU)										
Rehabilitation area	RA4									
Relevant activities	Mineralised waste									
Total rehabilitation area size (ha)	20.11									
Commencement of first milestone: RM2	1-Jan-48									
PMLU	Low intensity grazing									
Date area is available	1/01/48	1/01/49	1/01/50	1/01/53	1/01/58	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	20.11	20.11	20.11	20.11	20.11					
Milestone completed by	10/12/48	10/12/49	10/12/52	10/12/57	10/12/62	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	Cumulative area achieved (ha)									
RM2	20.11									
RM6		20.11								
RM8		20.11								
RM10			20.11							
RM12				20.11						
RM14					20.11					

(RA5) Rehabilitation area 5

Post-mining land uses (PMLU)										
Rehabilitation area	RA5									
Relevant activities	Mining and processing areas									
Total rehabilitation area size (ha)	19.52									
Commencement of first milestone: RM2	1-Jan-48									
PMLU	Low intensity grazing									
Date area is available	1/01/48	1/01/49	1/01/50	1/01/53	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	19.52	19.52	19.52	19.52						
Milestone completed by	10/12/48	10/12/49	10/12/52	10/12/57	10/12/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	Cumulative area achieved (ha)									
RM2	19.52									
RM6	19.52									
RM8		19.52								
RM10		19.52								
RM12			19.52							
RM14				19.52						

(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)										
Rehabilitation area	RA6									
Relevant activities	Tailings Storage Facility (TSF)									
Total rehabilitation area size (ha)	207									
Commencement of first milestone: RM1	1-Jan-48									
PMLU	Native ecosystem									
Date area is available	1/01/48	1/01/49	1/01/50	1/01/52	1/01/57		10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	207	207	207	207	207					
Milestone completed by	10/12/48	10/12/49	10/12/51	10/12/56	10/12/66		xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	Cumulative area achieved (ha)									
RM1	207									
RM7		207								
RM8			207							
RM9			207							
RM11				207						
RM13					207					

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	a) All buildings and associated infrastructure dismantled and removed offsite. b) All hardstand and concrete areas decommissioned removed. c) Fences removed. d) Pipelines removed. e) Roads removed (with the exception of those being retained for future site access). f) Waste removed. g) Drillholes, sediment ponds and sumps decommissioned. h) Machinery/ equipment not required for rehabilitation removed from site.
RM2	Removal of contaminated land	a) Contaminated land assessment is completed by a suitably qualified person. b) Identified contaminated material removed from the mine domain and disposed of at a licenced facility. c) Validation sampling determine that contaminant removal has been successful. d) Validation sampling report accepted by a suitably qualified Contaminated Land Auditor stating that contamination removal has been successful.
RM3	Landform development and reshaping - RA1	a) Landform shaped to be gently sloping characteristic of the natural landform and reinstates natural drainage lines. b) Landform ripped parallel to landform. c) Features such as large woody debris or boulders are present to provide suitable habitat for the Purple Neck Rock Wallaby. d) RA1 determined to be geotechnically stable by a suitably qualified geotechnical engineer.
RM4	Landform development and reshaping - RA2	a) Landform shaped to be gently sloping characteristic of the natural landform and reinstates natural drainage lines. b) Landform ripped parallel to landform. c) RA2 determined to be geotechnically stable by a suitably qualified geotechnical engineer.
RM5	Landform development and reshaping - RA3	a) General earthworks completed. b) HPDE Liner removed. c) Dams filled with NAF or other suitable material. Material placed in 500mm lifts, watered and compacted. d) Landform shaped to be gently sloping characteristic of the natural landform and reinstates natural drainage lines. e) RA3 determined to be geotechnically stable by a suitably qualified geotechnical engineer.
RM6	Landform development and reshaping - RA4/RA5	a) Removal of waste rock. PAF disposed of underground. NAF utilised in rehabilitation. b) Major earthworks completed. c) Landform shaped to be gently sloping characteristic of the natural landform and reinstates natural drainage lines.

		d) RA4 determined to be geotechnically stable by a suitably qualified geotechnical engineer.
RM7	Landform development and reshaping - RA6	a) The construction of the cover system / cap has been certified by an appropriately qualified person as being consistent with the cover design. b) QAQC testing is completed post construction at a rate of at least 1 sample per ha and confirms depth of layers and permeability is to specified designs and no PAF material is present within the cover system. c) Primary monitoring locations have been established in representative locations recommended as an outcome of the trial mentioned in Condition PRCP5(e) and include: i. An automated meteorological station that records the following: i. rainfall (tipping bucket), ii. evaporation, iii. relative humidity, iv. wind strength, v. wind direction, and vi. air temperature. ii. piezometers within the tailings and capillary break layer, i. automated in situ water content and suction sensors in each layer of the cover system and in the tailings below the cover system that records data at 30 minute intervals (except in the capillary break), ii. temperature sensor in each layer of the cover system and in the tailings below the cover system that records data at 30 minute intervals, iii. a lysimeter. d) Secondary monitoring locations have been established in representative locations recommended as an outcome of the trial mentioned in Condition PRCP5(e) and include in each layer of the cover system and in the tailings below the cover system: i. piezometers within the tailings and capillary break layer, ii. automated in situ water content sensors in each layer of the cover system and in the tailings below the cover system that records data at 30 minute intervals (except in the capillary break). e) Temperature sensor in each layer of the cover system and in the tailings below the cover system that records data at 30 minute intervals. All sensors are calibrated to each material type using the manufacturers specifications. f) Lysimeters and associated drainage collection and monitoring system are installed in at least 3 locations that are recommended as an outcome of the trial mentioned in Condition PRCP5(e). g) Sediment capture flumes have been installed and calibrated at the base of the TSF embankment. h) All monitoring equipment has been installed and calibrated by an appropriately qualified person. i) Slopes of TSF top to have a grade of 1% with slope lengths of ~2000m at the southern end of the TSF, and 1150m at the northern end. j) Certification by an AQP that landform has been constructed according to the design and has achieved an acceptable factor of safety.

		k) Main TSF embankment formed as a broad spillway rock chute with slopes of 15% with a slope length of ~230 m. l) TSF is assessed as geotechnically stable by a suitably qualified geotechnical engineer. m) Features such as large woody debris or boulders are present to provide suitable habitat for the Purple Neck Rock Wallaby. n) TSF surface has been shaped to prevent ponding and concentration of surface water flow. o) Spillway is designed and constructed to support peak flood flow velocity. p) An average erosion rate <5 t/ha/y. q) Erosion rilling is <0.2m. r) No surface ponding. s) Installation of erosion and sediment control structures that comply with International Erosion Control Association (IECA).
RM8	Surface preparation	a) Deep ripping of compacted surfaces, at least 300mm into soil profile, where required and avoiding habitat features associated with RM3. b) An assessment of the need for soil amelioration undertaken and soil ameliorants such as fertiliser, gypsum and/or organic matter have been applied at rates determined by an appropriately qualified person. c) Topsoil placement of a minimum 0.2 m.
RM9	Revegetation (native ecosystem)	a) Seeding rate of 4 – 10 kg/ha is applied. b) Direct seeding species mix is endemic to Regional Ecosystem 1.11.2 and 1.7.7 on RA1 including <i>Eucalyptus leucophloia</i>, <i>Corymbia terminalis</i>, <i>Corymbia capricornia</i> with a groundcover of <i>Aristida latifolia</i>, <i>Eriachne obtusa</i>, <i>Sporobolus australasicus</i>, <i>Themeda triandra</i>, <i>Triodia pungens</i>. c) Direct seeding species mix is endemic to Regional Ecosystem 1.11.2 and 1.7.7 on RA6 including <i>Aristida latifolia</i>, <i>Eriachne obtusa</i>, <i>Sporobolus australasicus</i>, <i>Themeda triandra</i>, <i>Triodia pungens</i>. d) Deep rooting vegetation such as <i>Eucalyptus</i> Spp not present on RA6. e) Groundcover >50%.
RM10	Revegetation (grazing)	a) Pasture vegetation seeding creates cover >30%. b) Direct seeding of native species including <i>Eucalyptus leucophloia</i>, <i>Corymbia capricornia</i>, <i>Terminalia aridicola</i>, <i>Corymbia terminalis</i>, <i>Triodia pungens</i>, <i>Eucalyptus pruinosae</i>, <i>Eremophila longifolia</i>, <i>Atalaya hemiglauca</i>, <i>Acacia chisholmii</i>, <i>Atalaya hemiglauca</i>, <i>Carissa lanceolata</i> as well as appropriate 3P grass species to support the PMLU. c) Direct seeding is applied at a rate of 4 – 10 kg/ha.
RM11	Achievement of surface requirements (native ecosystem)	For all areas: a) Weed species in densities less than 10% total coverage. b) Average erosion rate of <5 t/ha/y. c) Vegetation cover 70%. d) Species used in revegetation in RM 9 remain present and showing evidence of natural recruitment. e) Surface water quality measured at downstream monitoring sites (CT3-08 (MS2), CC-05, CC-15, MS8 (SN-15), SC-29 (MS5) and DR-18) undertaken on an event

		basis¹ complies with ANZECC/ARMCANZ (2000) Table 3.4.1 for 95% protection level and Table 3.3.4 values for aquatic ecosystems (slightly to moderately disturbed). f) Stream sediment quality at downstream monitoring sites (CT3-08 (MS2), CC-05, CC-15, MS8 (SN-15), SC-29 (MS5) and DR-18) undertaken twice a year (at end of wet season and end of dry season) complies with ANZECC/ARMCANZ (2000) Interim Sediment Quality Guidelines – low. g) Quarterly groundwater monitoring at MB5, MB6, MB9S and MB9D demonstrate groundwater quality complies with groundwater trigger limits nominated in Schedule C – Table 8 of the EA. h) Soil testing indicates the following parameters are met: i. Rootzone EC <0.15mS/cm, ii. Soil pH <9 and >6 as measured at any part of the root zone, iii. Exchangeable Sodium Percentage (ESP%) <5% (at 0-10cm depth). For RA6: i) There is no evidence of water ponding on the surface of the TSF. j) Continuous recording demonstrates seepage volume is decreasing. k) Seepage is collected and disposed of at an appropriately licensed facility. l) In-situ permeability and surface infiltration are not significantly decreasing compared with initial rates based on statistical analysis.
RM12	Achievement of surface requirements (grazing)	a) Weed species in densities less than 10% total coverage. b) Pasture covers has reached 70% of surface area. c) Average erosion rate of <5 t/ha/y with the maximum erosion rate at any point on the landform of <10 t/ha/y. d) Surface water quality measured at downstream monitoring sites (CT3-08 (MS2), CC-05, CC-15, MS8 (SN-15), SC-29 (MS5) and DR-18) undertaken on an event basis¹ complies with ANZECC/ARMCANZ (2000) Table 3.4.1 for 95% protection level and Table 3.3.4 values for aquatic ecosystems (slightly disturbed). e) Stream sediment quality at downstream monitoring sites (CT3-08 (MS2), CC-05, CC-15, MS8 (SN-15), SC-29 (MS5) and DR-18) undertaken twice a year (at end of wet season and end of dry season) complies with ANZECC/ARMCANZ (2000) Interim Sediment Quality Guidelines – low. f) Quarterly groundwater monitoring at MB5, MB6, MB9S and MB9D demonstrate groundwater quality complies with groundwater trigger limits nominated in Schedule C – Table 8 of the EA. g) Soil testing indicates the following parameters are met: i. Rootzone EC <0.15mS/cm, ii. Soil pH <9 and >6 as measured at any part of the root zone, iii. Exchangeable Sodium Percentage (ESP%) <5% (at 0-10cm depth).
RM13	Achievement of post-mining land use to a stable condition (native ecosystem)	For all areas: a) Vegetation cover exceeds 70% of the surface area.

		b) All species used in RM9 show natural recruitment. c) Weed species in densities less than 10% total coverage. d) Native fauna observed or indicators of these species have been recorded. e) There is no evidence of seepage occurring within the mining tenure. f) Certification from an REPQ that the domain has achieved stable condition.⁴ g) Certification from an AQP that the landform achieved a factor of safety 1.5. h) All results from surface water quality measured at downstream monitoring sites (CT3-08 (MS2), CC-05, CC-15, MS8 (SN-15), SC-29 (MS5) and DR-18) undertaken on an event basis¹ complies with ANZECC/ARMCANZ (2000) Table 3.4.1 for 95% protection level and Table 3.3.4 values for aquatic ecosystems (slightly disturbed) for a minimum of 5 consecutive years.¹ i) All results from stream sediment quality at downstream monitoring sites (CT3-08 (MS2), CC-05, CC-15, MS8 (SN-15), SC-29 (MS5) and DR-18) undertaken twice a year (at end of wet season and end of dry season) complies with ANZECC/ARMCANZ (2000) Interim Sediment Quality Guidelines – low for a minimum of 5 consecutive years. j) All results from quarterly groundwater monitoring at MB5, MB6, MB9S and MB9D demonstrate groundwater quality complies with groundwater trigger limits nominated in Schedule C – Table 8 of the EA for a minimum of 5 consecutive years. k) Soil testing undertaken at yearly intervals indicates the following parameters are met: i. Rootzone EC <0.15mS/cm, ii. Soil pH <9 and >6 as measured at any part of the root zone, iii. Exchangeable Sodium Percentage (ESP%) <5% (at 0-10cm depth). For RA1: l) No evidence of erosion classified as 'Severe'³. m) No active erosion present as demonstrated by no increase in erosion ratings³ over time. For RA6: n) There is no evidence of water ponding on the surface of the TSF. o) Average erosion rate of <5 t/ha/y. p) No evidence of erosion classified as 'moderate' or 'severe'. q) No evidence of salt rise through the cover system of the TSF. r) In-situ permeability and surface infiltration are not significantly decreasing compared with initial rates based on statistical analysis. s) Results of monitoring gathered from primary and secondary monitoring stations established in RM7 demonstrate the following has been maintained for a minimum of 10 years: i. Hydraulic conductivity of the cover system is less than 1×10^{-8} m/s for at least 10 years, ii. Net percolation through the cover into the tailings has been reduced to <5% of rainfall for at least 10 years as measured by primary and secondary monitoring locations and lysimeters,
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		iii. Water content of the reduced permeability layer is maintained above 85% over a 10 year period, iv. Temperature within the tailings has not increased over a 10 year period, v. Volumetric water content of tailings does not respond to rainfall events.
RM14	Achievement of post-mining land use to a stable condition (grazing)	a) Weed species in densities less than 10% total coverage. b) Vegetation cover has reached 70%. c) All established species show natural recruitment. d) Land suitability assessment by an appropriately qualified person certifies land has achieved a post-mine land suitability² of 4² or better. e) Minimum of 4 palatable perennial pasture species and 2 shade tree species established. f) No evidence of erosion classified as 'Severe'³. g) No active erosion present as demonstrated by no increase in erosion ratings³ over time. h) There is no evidence of seepage occurring within the mining tenure. i) Certification from an REPQ that the domain has achieved stable condition.⁴ j) Certification from an AQP that the landform achieved a factor of safety 1.5. k) All results from surface water quality measured at downstream monitoring sites (CT3-08 (MS2), CC-05, CC-15, MS8 (SN-15), SC-29 (MS5) and DR-18) complies with ANZECC/ARMCANZ (2000) Table 3.4.1 for 95% protection level and Table 3.3.4 values for aquatic ecosystems (slightly to moderately disturbed) for a minimum of 5 consecutive years.¹ l) All results from stream sediment at downstream monitoring sites (CT3-08 (MS2), CC-05, CC-15, MS8 (SN-15), SC-29 (MS5) and DR-18) undertaken twice a year (at end of wet season and end of dry season) complies with limits set for low risk and no adverse effects in ANZECC/ARMCANZ (2000) Interim Sediment Quality Guidelines – low for a minimum of 5 consecutive years. m) All results from quarterly groundwater monitoring at MB5, MB6, MB9S and MB9D demonstrate groundwater quality complies with groundwater trigger limits nominated in Schedule C – Table 8 of the EA for a minimum of 5 consecutive years. n) Soil testing undertaken at yearly intervals indicates the following parameters are met: i. PAWC >50 at Red Plain and Pocket soil types, ii. Rootzone EC <0.15mS/cm, iii. Soil pH <9 and >6 as measured at any part of the root zone, iv. Exchangeable Sodium Percentage (ESP%) <5% (at 0-10cm depth), v. Carrying capacity is suitable to support a sustainable level of grazing.

¹ Sites on tributaries of Dugald River sample daily for the first two days when stream flows commence. If flows persist, sample weekly until flow ceases.

Dugald River Sites sample Dugald River sites daily while flows are present downstream of the mine and daily for one week after cessation of flows in the tributaries downstream of the mine.

Sample monthly if flows are present in Dugald River during the wet season.

Cabbage Tree Creek sites Sample CT3 08, CC 05 and CC 06 daily when flows are present at CT3 08 and sample CC 05 and CC 06 daily for two days after flows at CT3 08 cease. Sample CC-05 and CC-06 weekly if flows are present.

² Department of Science, Information Technology and Innovation and Department of Natural Resources and Mines (2015) Guidelines for Agricultural

Land Evaluation in Queensland (Second Edition), State of Queensland or later version. (<https://www.publications.qld.gov.au/dataset/qld-agricultural-land-evaluation-guidelines/resource/d6591386-08e2-453f-a6fa-dff2a756215f>)

³Erosion classification framework:

Erosion classification	Minor	Moderate	Severe
Sheet erosion	Shallow soil deposits downslope	Partial exposure of roots; moderate soil deposits downslope, etc.	Loss of surface horizon; root exposure, etc
Rill/gully erosion	<15 rills and <0.3m deep	15-30 rills and <0.3m deep	>30 rills and/or any >0.3m deep.
Tunnel erosion	-	-	Present
Mass movement	-	-	Present

⁴ Stable condition is defined by s111A of the Environmental Protection Act 1994.

END OF **PRCP** SCHEDULE