APPENDIX C – CONSOLIDATED PROJECT APPROVAL

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the project referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:
- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Frank Sartor MP
Minister for Planning

Sydney 2007

SCHEDULE 1

Application Number:	06_0014
Proponent:	Mangoola Coal Operations Pty Limited
Approval Authority:	Minister for Planning
Land:	See Appendix 1
Project:	Mangoola Coal Project

Blue type represents 22 July 2008 modification.
Red type represents 23 June 2009 modification.
Green type represents 4 November 2009 modification.
Purple type represents 23 February 2010 modification.
Lavender type represents 22 June 2012 modification.
Orange type represents 28 April 2014 modification.
Aqua type represents 22 August 2016 modification
Pink type represents May 2017 modification

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DEFINITIONS

Annual review	The review required by condition 6 of schedule 5
BCA	Building Code of Australia
Biodiversity Offset Strategy	The conservation and enhancement program described in the EA and response to submissions
Blast misfire	The failure of one or more holes in a blast pattern to initiate
CCC	Community Consultative Committee
Council	Muswellbrook Shire Council
CHPP	Coal Handling and Preparation Plant
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
DRE	Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services
DPI Water	Department of Primary Industries - Water
EA	Environmental Assessment titled *Anvil Hill Project Environmental Assessment, Volumes 1-7*, dated August 2006, including the response to submissions
EA (MOD 1)	Modification application MP 06_0014 MOD 1, and accompanying Environmental Assessment dated April 2008, including the letter from Xstrata to P&I dated 4 July 2008
EA (MOD 2)	Modification application MP 06_0014 MOD 2, and accompanying Environmental Assessment prepared by Umwelt Environmental Consultants and dated December 2008, including the Response to Submissions dated April 2009
EA (MOD 3)	Modification application MP 06_0014 MOD 3, and accompanying Environmental Assessment titled *Environmental Assessment for Section 75W Modification to Approved Mining Operation, Mangoola Coal – Relocation of Mining Infrastructure Area*, dated September 2009
EA (MOD 4)	Modification application MP 06_0014 MOD 4, and accompanying Environmental Assessment titled *Modifications to Mangoola Coal Mine Plans and Relocation of 500kV Electricity Transmission Line Environmental Assessment* (4 volumes), dated December 2010, including the Response to Submissions dated September 2011
EA (MOD 5)	Modification application MP 06_0014 MOD 5, and accompanying Environmental Assessment titled *Environmental Assessment for Night Time Rail Works*, dated February 2010
EA (MOD 6)	Modification application MP 06_0014 MOD 6, and accompanying Environmental Assessment titled *Modification 6 Environmental Assessment* (4 volumes), dated May 2013, including the Response to Submissions, dated August 2013
EA (MOD 7)	Modification application MP 06_0014 MOD 7, and accompanying Environmental Assessment titled *Mangoola Coal Modification 7 Environmental Assessment, Administrative Modification – Removal of Condition 3, Schedule 3*, dated May 2016
EA (MOD 8)	Modification application MP 006_0014 MOD 8, and accompanying Environmental Assessment titled *Mangoola Coal Project, Section 75W Modification Application*, dated November 2016
EEC	Endangered Ecological Community as defined under the NSW *Threatened Species Conservation Act 1995*
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPA	Environment Protection Authority
EPL	Environment Protection Licence
Evening	The period from 6pm to 10pm
Executive Director Mineral Resources	Executive Director of Mineral Resource within DRE, or equivalent position
Feasible	Feasible relates to engineering considerations and what is practical to build or implement
Incident	A set of circumstances that: • causes or threatens to cause material harm to the environment; and/or • breaches or exceeds the limits or performance measures/criteria in this approval
Ironbark Woodland Complex	As defined in the *Threatened Species Conservation Act 1995*

Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 4 and 5 of this approval where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mining Operations	Includes the removal and emplacement of overburden, and extraction, processing, handling, storage and transport of coal on site
Minister	Minister for Planning, or delegate
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
OEH	Office of Environment and Heritage
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Project	The development as described in the EA
Proponent	Mangoola Coal Operations Pty Limited, or any other person or persons who rely on this approval to carry out the project that is subject to this approval
POEO Act	*Protection of the Environment Operations Act 1997*
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the project to a good condition, and ensure it is safe, stable and non-polluting
RMS	Roads and Maritime Services
ROM	Run of Mine
Saline water	Water from the project's saline water management system as described in the EA
Secretary	Secretary of the Department, or nominee
Site	The land referred to in Appendix 1
TSC Act	*NSW Threatened Species Conservation Act 1995*
VPA	Voluntary planning agreement under the EP&A Act

SCHEDULE 2
ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. In addition to meeting the specific performance criteria established under this approval, the Proponent must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the project.

Terms of Approval

2. The Proponent must carry out the project generally in accordance with the:
   (a) EA;
   (b) EA (MOD 1);
   (c) EA (MOD 2);
   (d) EA (MOD 3);
   (e) EA (MOD 4);
   (f) EA (MOD 5);
   (g) EA (MOD 6);
   (h) EA (MOD 7);
   (i) EA (MOD 8); and
   (j) the Project Layout Plan.

   Note: The Project Layout Plan is included in Appendix 2.

2A. The proponent must carry out the project in accordance with the conditions of this approval.

3. If there is any inconsistency between the documents listed in condition 2 of Schedule 2, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.

4. The Proponent must comply with any reasonable requirement/s of the Secretary arising from The Department's assessment of:
   (a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with this approval;
   (b) any reports, reviews or audits commissioned by the Department regarding compliance with this approval; and
   (c) the implementation of any actions or measures contained in these documents.

Limits on Approval

5. Mining operations may take place for 21 years from the grant of the mining lease for the project.

   Note: Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings to the satisfaction of both the Secretary and the Executive Director Mineral Resources. Consequently, this approval will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.

6. The Proponent must not extract more than 13.5 million tonnes of ROM coal from the site in any calendar year.

7. The Proponent must only transport coal from the site by rail.

Staged submission of strategies, plans or programs

8. With the approval of the Secretary, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.

   Notes:
   - *While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and*
   - *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

Structural Adequacy

9. The Proponent must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

- *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.*

Demolition

10. The Proponent must ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

Operation of Plant and Equipment

11. The Proponent must ensure that all plant and equipment used on site, or any equipment used for monitoring the performance of the project is:
    (a) maintained in a proper and efficient condition; and
    (b) operated in a proper and efficient manner.

Voluntary Planning Agreement

12. By the end of September 2014, or as otherwise agreed by the Secretary, the Proponent must revise and update the VPA for the project with Council in accordance with:
    (a) Division 6 of Part 4 of the EP&A Act; and
    (b) the terms of the Proponent's offer for contributions endorsed by Council in August 2013 (for Modification 6), which includes the matters set out in Appendix 3.

SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS

ACQUISITION ON REQUEST

1. Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Proponent must acquire the land in accordance with the procedures in conditions 5-6 of schedule 4.

Table 1: Land subject to acquisition upon request

Land Number [1]	
25	121*
34	132*
66*	164*
81	Lot 1 DP 75029, Lot 1 DP 414239 *
83	Lots 68, 69, 70, 71, 76 & 77 DP 750924 *

Acquisition rights for the landowners identified in the above table with * will cease 12 months from the date of the approval of Modification 6 (28 April 2015).

Note:
1. To interpret the locations referred to in Table 1, see applicable figure in Appendix 4.

NOISE

Noise Impact Assessment Criteria

2. The Proponent must ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land or at the Anglican Church, Castlerock Road.

Table 2: Noise impact assessment criteria dB(A)

Day	Evening	Night		Land Number
$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	$L_{A1(1minute)}$	
40	40	40	45	132A
39	39	39	45	121, 132B
38	38	38	45	176
37	37	37	45	25, 66, 110, 130, 148 154, 164
36	36	36	45	106C, 111, 174A, 174B, 175
35	35	35	45	109, 134A, 134B, 177, 190, 251
35	35	35	45	All other privately-owned land
41	41	41	-	Anglican Church, Castlerock Road

Note: To interpret the land referred to in Table 2, see the applicable figures in Appendix 4.

Noise generated by the Mangoola mine is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy*. Appendix 8 sets out the metrological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

3. Deleted

Additional Noise Mitigation Measures

4. Upon receiving a written request from:
   - the owner of a residence on the land listed in Table 1 (unless the landowner has requested acquisition); or
   - the owner of any residence identified with a specific land number listed in Table 2 (except where a negotiated noise agreement is in place); or

- the owner of residences 246, 249 or 251 due to road traffic noise impacts (except where a negotiated noise agreement is in place for road traffic noise),

the Proponent must implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner.

These additional mitigation measures must be reasonable and feasible.

If within 3 months of receiving this request from the landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

Within 3 months of this approval (or within 3 months of any subsequent modification to the approval which results in additional properties being affected), the Proponent must notify all applicable landowners that they are entitled to receive additional noise mitigation measures.

Cumulative Noise Criteria

5. The Proponent must take all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other mines does not exceed the following amenity criteria on any privately-owned land, excluding the land listed in the table to Table 1 above, to the satisfaction of the Secretary:
   - $L_{Aeq(11\ hour)}$ 50 dB(A) – Day;
   - $L_{Aeq(4\ hour)}$ 45 dB(A) – Evening; and
   - $L_{Aeq(9\ hour)}$ 40 dB(A) – Night.

6. If the cumulative noise generated by the project combined with the noise generated by other mines causes sustained exceedances of the following amenity criteria on any privately-owned land, excluding the land listed in the table to Table 1 above, then upon receiving a written request from the landowner, the Proponent must take all reasonable and feasible measures to acquire the land on as equitable basis as possible with the relevant mines, in accordance with the procedures in conditions 10-11 of schedule 4, to the satisfaction of the Secretary:
   - $L_{Aeq(11\ hour)}$ 53 dB(A) – Day;
   - $L_{Aeq(4\ hour)}$ 48 dB(A) – Evening; and
   - $L_{Aeq(9\ hour)}$ 43 dB(A) – Night.

   Notes:
   - *For the purpose of this condition, the expression "Proponent" in conditions 10-11 of schedule 4 should be interpreted as the Proponent and any other relevant mine owners.*
   - *The cumulative noise generated by the project combined with the noise generated by other mines is to be measured in accordance with the relevant procedures in the NSW Industrial Noise Policy.*

Operating Conditions

7. The Proponent must:
   (a) implement all reasonable and feasible measures to minimise the operational, road and rail noise of the project;
   (b) operate a comprehensive noise management system on site that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval;
   (c) minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply (see Appendix 8);
   (d) carry out monthly attended monitoring in accordance with Appendix 8 (unless otherwise agreed with the Secretary), to determine whether the project is complying with the relevant conditions of this approval,

   to the satisfaction of the Secretary.

Hours of Gravel Operations

8. The Proponent must only undertake gravel screening and crushing operations on the site between 7 am and 6 pm Monday to Friday, and between 8 am and 1 pm on Saturdays. No gravel screening and crushing operations are allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.

Noise Management Plan

9. The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:
   (a) describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this approval;
   (b) describe the proposed noise management system in detail; and

(c) include a monitoring program that:

- evaluates and reports on:
  - the effectiveness of the noise management system;
  - compliance against the noise criteria in this approval; and
  - compliance against the noise operating conditions;
- includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time noise monitoring program can be used as a better indicator of compliance with the noise criteria in this approval and trigger for further attended monitoring); and
- defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

The Proponent must implement the approved management plan as approved from time to time by the Secretary.

9A. The Proponent must continue to contribute to reasonable maintenance and recurrent operating costs associated with the additional noise mitigation measures already installed at privately-owned residences previously identified as having additional noise mitigation rights under the original Project Approval No 06-0014. The contribution to ongoing maintenance and recurrent operating costs must be consistent with any existing agreement between the Proponent and the relevant landowner.

Note: If there is any dispute about the implementation of this condition, then either party may refer the matter to the Secretary for resolution.

BLASTING

Blasting Criteria

10. The Proponent must ensure that blasting on site does not cause exceedances of the criteria in Table 4.

Table 4: Blasting criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months
500kV transmission line pylons – tension towers		50	0%
500kV transmission line pylons – suspension towers		100	0%

However, these criteria do not apply if the Proponent has a written agreement with the relevant owner to exceed these criteria, and has advised the Department in writing of the terms of this agreement.

Blasting Hours

11. The Proponent must only carry out blasting on site between 9am and 3pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of EPA.

Blasting Frequency

12. The Proponent may carry out a maximum of:
(a) 2 blasts a day; and
(b) 6 blasts a week, averaged over a calendar year on the site.

This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, blasts misfires or blasts required to ensure the safety of the mine or its workers.

Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.

Property Inspections

13. If the Proponent receives a written request from the owner of any privately-owned land within 2 kilometres of any approved open cut mining pit on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Proponent must:
    (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:
        - establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and
        - identify measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and
    (b) give the landowner a copy of the new or updated property inspection report.

    If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Secretary for resolution.

Property Investigations

14. If the owner of any privately-owned land within 2km of the site (or on any other land where the Secretary agrees that a property investigation is warranted) claims that buildings and/or structures on his/her land have been damaged as a result of blasting on the site, then within 2 months of receiving this claim the Proponent must:
    (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and
    (b) give the landowner a copy of the property investigation report.

    If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent must repair the damage to the satisfaction of the Secretary.

    If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Secretary for resolution.

Operating Conditions

15. The Proponent must:
    (a) implement best practice to manage potential blasting impacts associated with the project to:
        - protect the safety of people and livestock in the surrounding area;
        - protect public or private infrastructure/property in the surrounding area from any damage; and
        - minimise the dust and fume emissions of any blasting;
    (b) ensure that blasting on the site does not damage Aboriginal rock shelter sites, Anvil Rock and "The Book" rock formations;
    (c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site,

    to the satisfaction of the Secretary.

16. The Proponent must not undertake blasting on site within 500 metres of any public road or any land outside the site not owned by the Proponent unless the Proponent has:
    (a) demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock or damaging the infrastructure and/or other buildings and structures; and
    (b) updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the infrastructure or land; or
    (c) a written agreement with the relevant infrastructure owner or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Proponent has advised the Department in writing of the terms of this agreement.

Blast Management Plan

17. The Proponent must prepare a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:
    (a) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this approval;
    (b) propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site (if relevant); and

(c) include a monitoring program for evaluating and reporting on compliance with the blasting criteria and operating conditions of this approval.

The Proponent must implement the approved management plan as approved from time to time by the Secretary.

AIR QUALITY

Odour

18. The Proponent must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.

Impact Assessment Criteria

19. The Proponent must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any residence on privately-owned land (excluding the dust affected properties listed in Table 1).

Table 5: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	[d]Criterion
Total suspended particulate (TSP) matter	Annual	[a] 90 µg/m^3
Particulate matter < 10 µm (PM_{10})	Annual	[a] 30 µg/m^3

Table 6: Short term impact assessment criterion for particulate matter

Pollutant	Averaging period	[d]Criterion
Particulate matter < 10 µm (PM_{10})	24 hour	[a] 50 µg/m^3

Table 7: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
[c]Deposited dust	Annual	[b] 2 g/m^2/month	[a] 4 g/m^2/month

Notes to Tables 5-7:

a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);

b Incremental impact (i.e. incremental increase in concentrations due to the development on its own);

c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and

d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Secretary.

Land Acquisition Criteria

20. If particulate matter emissions generated by the project exceed the criteria, or contribute to the exceedances of the relevant cumulative criteria, in Tables 8, 9 and 10 at any residence on privately-owned land then upon receiving a written request for acquisition from the landowner, the Proponent must acquire the land in accordance with the procedures in conditions 10-11 of schedule 4.

Table 8: Long term land acquisition criteria for particulate matter

Pollutant	Averaging period	[d]Criterion
Total suspended particulate (TSP) matter	Annual	[a] 90 µg/m^3
Particulate matter < 10 µm (PM_{10})	Annual	[a] 30 µg/m^3

Table 9: Short term land acquisition criteria for particulate matter

Pollutant	Averaging period	[da]Criterion
Particulate matter < 10 µm (PM_{10})	24 hour	[a] 150 µg/m^3
Particulate matter < 10 µm (PM_{10})	24 hour	[b] 50 µg/m^3

Table 10: Long term land acquisition criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
[c] Deposited dust	Annual	[b] 2 g/m^2/month	[a] 4 g/m^2/month

Notes to Tables 8-10:

a *Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);*

b *Incremental impact (i.e. incremental increase in concentrations due to the development on its own);*

c *Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and*

d *Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Secretary.*

If the air quality acquisition criteria in Tables 8, 9 and 10 are being exceeded, and more than one mine is responsible for this non-compliance, then the Proponent must, together with the relevant mine/s acquire the land on as equitable a basis as possible with the relevant mine/s, in accordance with the procedures in conditions 10-11 of schedule 4.

If the Proponent cannot agree on the arrangements for the acquisition of the land with the relevant/ mine/s within 3 months of the written request from the landowner, then the Proponent must refer the matter to the Secretary for resolution.

Mine-owned Land

21. The Proponent must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria listed in Tables 8, 9 and 10 at any occupied residence on mine-owned land (including land owned by another mine) unless:
    (a) the tenant and landowner has been notified of any health risks associated with such exceedances in accordance with the notification requirements under schedule 4 of this approval;
    (b) the tenant of any land owned by the Proponent can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice;
    (c) air quality monitoring is regularly undertaken to inform the tenant and landowner of the actual particulate emissions; and
    (d) data from this monitoring is presented to the tenant in an appropriate format, for a medical practitioner to assist the tenant in making informed decisions on the health risks associated with occupying the property,

    to the satisfaction of the Secretary.

Operating Conditions

22. The Proponent must:
    (a) implement all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions of the project;
    (b) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site;
    (c) minimise any visible off-site air pollution generated by the project;
    (d) minimise the surface disturbance of the site;
    (e) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this approval;
    (f) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see Note d above under Table 10),

    to the satisfaction of the Secretary.

Air Quality Management Plan

23. The Proponent must prepare an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:
    (a) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this approval;
    (b) describe the project air quality management system;
    (c) include an air quality monitoring program that:
        - uses a combination of real-time monitors and supplementary monitors, to evaluate the performance of the project against the air quality criteria in this approval;
        - adequately supports the proactive and reactive air quality management system;
        - includes $PM_{2.5}$ monitoring (although this obligation could be satisfied by the regional air quality monitoring network if sufficient justification is provided);
        - evaluates and reports on the effectiveness of the air quality management system and compliance against the air quality operating conditions; and
        - defines what constitutes an air quality incident, and includes a protocol for determining and notifying the Department and relevant stakeholders of any air quality incidents; and
    (d) describe the management process and apply the necessary mitigation measures to minimise the effect of dust deposits on the performance of rainwater filtration for human consumption and electronic solar systems on private residential properties.

The Proponent must implement the approved management plan as approved from time to time by the Secretary.

METEOROLOGICAL MONITORING

24. During the life of the project, the Proponent must ensure that there is a suitable meteorological station in the vicinity of the site that:
    (a) complies with the requirements in *the Approved Methods for Sampling of Air Pollutants in New South Wales guideline*; and
    (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*, unless a suitable alternative is approved by the Secretary following consultation with the EPA.

WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain the necessary water licences for the project.

Water Supply

25. The Proponent must not use any licensable water from the Wybong Creek Water Source for mining purposes.

Note: This restriction does not apply to water used outside the project disturbance area for revegetation purposes associated with implementation of the Biodiversity Offset Strategy, or to any licensable water within the project disturbance area that is collected as an incidental result of approved mining activities.

26. The Proponent must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Secretary.

Water Pollution

27. Unless an EPL or the EPA authorises otherwise, the Proponent must comply with Section 120 of the POEO Act and the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

27.A The Proponent must implement all reasonable and feasible measure on the site to minimise the need to discharge saline water to the Hunter River under the Hunter River Salinity Trading Scheme.

Site Water Management Plan

28. The Proponent must prepare and a Site Water Management Plan for the project to the satisfaction of the Secretary. This plan must:
    (a) be prepared in consultation with EPA and DPI Water by suitably qualified expert/s whose appointment/s have been approved by the Secretary; and
    (b) include:
        - a Site Water Balance;

- an Erosion and Sediment Control Plan;
- a Surface Water Monitoring Plan;
- a Ground Water Monitoring Program; and
- a Surface and Ground Water Response Plan.

The Proponent must implement the approved management plan as approved from time to time by the Secretary.

Site Water Balance

29. The Site Water Balance must:
    (a) include details of:
        - sources and security of water supply;
        - water use on site;
        - water management on site;
        - off-site water transfers;
        - reporting procedures; and
    (b) investigate and describe measures to minimise water use by the project.

Erosion and Sediment Control

30. The Erosion and Sediment Control Plan must:
    (a) be consistent with the requirements of the Department of Housing's Managing Urban Stormwater: Soils and Construction manual;
    (b) identify activities that could cause soil erosion and generate sediment;
    (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
    (d) describe the location, function, and capacity of erosion and sediment control structures; and
    (e) describe what measures would be implemented to maintain the structures over time.

Surface Water Monitoring

31. The Surface Water Management and Monitoring Plan must include:
    (a) detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the project;
    (b) surface water and stream health impact assessment criteria;
    (c) a program to monitor surface water flows, quality and impacts on water users (upstream and downstream of the project in Anvil Creek, Sandy Creek, Big Flat Creek and Wybong Creek);
    (d) a program to assess stream health conditions in Anvil Creek, Sandy Creek, Big Flat Creek and Wybong Creek;
    (e) a program to monitor channel stability in Anvil Creek, Sandy Creek and Big Flat Creek;
    (f) reporting procedures for the results of the monitoring program;
    (g) a program to monitor, and a strategy to minimise, any saline water discharges to the Hunter River under the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*;
    (h) a Saline Dispersion Study for discharges to the Hunter River prepared and implemented to the satisfaction of the EPA; and
    (i) a program to notify all downstream landowners within 2 kilometres of the discharge point prior to discharging saline water to the Hunter River.

    Note: Conditions (g) – (i) only apply once the EPL for the project has been amended to allow discharges into the Hunter River.

Groundwater Monitoring

32. The Groundwater Monitoring Program must include:
    (a) detailed baseline data, based on sound statistical analysis, to benchmark the pre-mining natural variation in groundwater levels, yield and quality (including privately owned groundwater bores within the predicted drawdown impact zone identified in the EA);
    (b) groundwater impact assessment criteria (including for monitoring bores and privately owned bores);
    (c) a program for accurately delineating the boundary of the Big Flat Creek alluvial aquifer in any areas intersected by mining, including plans for isolation of the mining pit from the alluvium at least 6 months before mining within 150 metres of the alluvium;
    (d) a program to monitor:
        - impacts on the groundwater supply of potentially affected landowners;
        - impacts on the Big Flat Creek and Wybong Creek alluvial aquifers;
        - impacts on groundwater dependent ecosystems and riparian vegetation;

- the volume of ground water seeping into the open cut mine workings;
- regional ground water levels and quality in the alluvial, coal seam, and overburden/interburden aquifers; and
- the groundwater pressure response in the surrounding coal measures;

(e) procedures for the verification of the groundwater model; and
(f) reporting procedures for the results of the monitoring program and model verification.

Surface and Ground Water Response Plan

33. The Surface and Ground Water Response Plan must include:
(a) a protocol for the investigation, notification and mitigation of any exceedances of the surface water, stream health and groundwater impact assessment criteria;
(b) measures to mitigate and/or compensate potentially affected landowners with privately owned groundwater bores within the predicted drawdown impact zone identified in the EA, including provision of alternative supply of water to the affected landowner that is equivalent to the loss attributed to the project;
(c) measures to mitigate and/or compensate potentially affected landowners for the loss of surface water flows in Sandy Creek, Big Flat Creek and Wybong Creek downstream of the project;
(d) measures to minimise, prevent or offset groundwater leakage from the Big Flat Creek alluvial aquifer;
(e) measures to mitigate any direct hydraulic connection between the backfilled open cuts and the Big Flat Creek alluvium if the potential for adverse impacts is detected;
(f) a contingency plan for isolating the Big Flat Creek alluvium from Anvil Creek alluvium and mining areas in the event that it is required; and
(g) the procedures that would be followed if any unforeseen impacts are detected during the project.

BIODIVERSITY

Biodiversity Offset Strategy

34. The Proponent must implement the Biodiversity Offset Strategy as outlined in Table 11, and as generally described in the EA (and shown conceptually in Appendix 5).

Table 11: Biodiversity Offset Strategy

Area	*Minimum Size*
Existing vegetated (treed) areas	1,586 ha
Treed areas to be established	1,104 ha
Grassland areas	330 ha
Total	**3,020 ha**

Notes:
(a) The offset areas are in addition to, and outside, the rehabilitated areas of the project disturbance area.
(b) The quantum of existing and revegetated treed areas may be varied within reason, subject to meeting the total minimum offset area.

35. The Proponent must ensure that the Biodiversity Offset Strategy (and the rehabilitation of the site) is focused on the re-establishment of:
(a) significant and/or threatened plant communities, including:
- Ironbark Woodland Complex;
- Bulloak Woodland;
- Paperbark Woodland;
- Slaty Box Woodland;
- Forest Red Gum Riparian Woodland;
- Rough Barked Apple Woodland;
- Swamp Oak Riparian Forest; and
- Weeping Myall Woodland;

(b) significant and/or threatened plant species, including:
- *Goodenia macbarronii*;
- *Diuris tricolor*;
- *Prasophyllum sp. aff. Petilum*;
- *Oligochaetochilus sp. aff. Praetermissus*;
- *Cymbidium canaliculatum;*
- *Bothriochloa biloba;*
- *Acacia pendula;*

- *Prasophyllum sp. wybong;*
- *Commersonia rosea;and*
- *Pomaderris queenslandica; and*

(c) significant and/or threatened animal species, including molluscan fauna.

36. The Proponent must ensure that the regeneration of grassland within the biodiversity offset strategy is focused on the re-establishment of flora species typical of the Ironbark Woodland Complex as defined under the TSC Act.

Long Term Security of Offset

37. By the end of 30 September 2014, unless otherwise agreed by the Secretary, the Proponent must make suitable arrangements to provide appropriate long term security for the offset areas to the satisfaction of the Secretary.

Translocation Plan for Orchids and Other Threatened Flora

38. The Proponent must implement the mitigation and management measures for the identified orchids and other threatened flora species within the project disturbance area in accordance with the approved *Translocation Plan for Orchids and Other Threatened Flora*, dated September 2012 and prepared by Umwelt, to the satisfaction of the Secretary.

Biodiversity Management Plan

39. The Proponent must prepare a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:

(a) be prepared in consultation with OEH, and submitted to the Secretary for approval by 30 September 2014;

(b) describe the short, medium, and long term measures that would be implemented to:
- implement the Biodiversity Offset Strategy;
- manage the remnant vegetation and habitat on the site and in the offset areas; and
- integrate the implementation of the biodiversity offset strategy to the greatest extent practicable with the rehabilitation of the site;

(c) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);

(d) include a detailed description of the measures that would be implemented over the next 3 years for:
- enhancing the quality of existing vegetation and fauna habitat in the biodiversity offset areas;
- creating native vegetation and fauna habitat in the biodiversity offset areas and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary);
- maximising the salvage of resources within the approved disturbance area - including vegetative and soil resources – for beneficial reuse in the enhancement of the biodiversity offset areas or rehabilitation area;
- minimising the risk of *Phythophora cinnamomi* spread, based on detailed soil investigations;
- collecting and propagating seed;
- protecting vegetation and fauna habitat outside the approved disturbance area on-site;
- minimising the impacts on fauna on site, including undertaking pre-clearance surveys;
- managing any potential conflicts between the proposed enhancement works in the Biodiversity Offset Strategy areas and any Aboriginal heritage values (both cultural and archaeological) in these areas;
- managing salinity;
- controlling weeds and feral pests;
- controlling erosion;
- managing grazing and agriculture on site;
- controlling access; and
- bushfire management;

(e) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;

(f) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and

(g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Proponent must implement the approved management plan as approved from time to time by the Secretary.

Conservation Bond

40. Within 3 months of the approval of the Biodiversity Management Plan, the Proponent must lodge a conservation and biodiversity bond with the Department to ensure that the Offset Strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by:
    (a) calculating the full cost of implementing the Biodiversity Offset Strategy (other than land acquisition costs); and
    (b) employing a suitably qualified quantity surveyor to verify the calculated costs,
    to the satisfaction of the Secretary.

    The calculation of the Conservation Bond must be submitted to the Department for approval at least 1 month prior to lodgement of the final bond.

    If the Offset Strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the conservation bond.

    If the Offset Strategy is not completed to the satisfaction of the Secretary, the Secretary will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.

ABORIGINAL CULTURAL HERITAGE

Aboriginal Cultural Heritage Management Plan

41. The Proponent must prepare an Aboriginal Cultural Heritage Management Plan to the satisfaction of the Secretary. This plan must:
    (a) be prepared in consultation with OEH and the Aboriginal communities;
    (b) be submitted to the Secretary for approval prior to the disturbance of any Aboriginal object or site; and
    (c) include a:
        - detailed salvage program and management plan for all Aboriginal sites within the project disturbance area;
        - detailed description of the measures that would be implemented to protect Aboriginal sites outside the project disturbance area, including the 16 Aboriginal rock shelter sites identified in the EA;
        - detailed plan for the management of Aboriginal cultural heritage values of high significance in the offset areas (see condition 34 above), including managing Site SC10 for use by the Aboriginal community for teaching and educational purposes, and maintaining reasonable access to Aboriginal sites;
        - detailed monitoring program for the 16 Aboriginal rock shelter sites identified in the EA;
        - description of the measures that would be implemented if any new Aboriginal objects or skeletal remains are discovered during the project; and
        - protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.

    The Proponent must implement the approved management plan as approved from time to time by the Secretary.

    Note: The 16 Aboriginal rock shelter sites include sites AC38, AC42, BFC12, CG01, CG08, CG09, CG10, WC05, WC25, WC26, WC27, WC33, WC43, WC45, WC46 and WC47, as shown on the figure in Appendix 6.

HERITAGE

Wybong Community Heritage

42. Prior to starting mining operations on site, the Proponent must prepare a report documenting the history of the Wybong community to the satisfaction of the Secretary. This report must:
    (a) be prepared in consultation with the Wybong community and OEH; and
    (b) include:
        - detailed historical research and oral history for all the land within the 40dBA noise contour (see the EA); and

- archival recording, in accordance with the requirements and guidelines of OEH, for all items of heritage value within the project disturbance area and blast affectation area (including 'Castle Hill').

43. The Proponent must prepare a detailed Conservation Management Strategy for all heritage items within the blast affectation area to the satisfaction of the Secretary. This strategy must:
    (a) be prepared in consultation with the relevant landowners and OEH;
    (b) be submitted to the Secretary for approval prior to starting mining operations on site; and
    (c) include a:
        - program for baseline dilapidation surveys of the heritage items;
        - program to monitor the effects of blasting on the heritage items; and
        - description of the measures that would be implemented to protect relevant heritage items (particularly Castle Hill) from the effects of blasting; and
        - description of the measures that would be implemented to protect Anvil Rock and 'The Book' rock formations from the effects of blasting.

    The Proponent must implement the approved management strategy as approved from time to time by the Secretary.

    Note: For the purposes of these conditions the blast affectation area includes all properties predicted to exceed the 5mm/sec ground vibration criteria.

TRAFFIC AND TRANSPORT

Monitoring of Coal Transport

44. The Proponent must:
    (a) keep records of the:
        - amount of coal transported from the site each year; and
        - number of coal haulage train movements generated by the project (on a daily basis); and
    (b) include these records in the Annual Review.

Thomas Mitchell Drive

45. The Proponent must contribute to the upgrade and maintenance of Thomas Mitchell Drive, and the upgrade of the Thomas Mitchell Drive/Denman Road intersection, proportionate to its impact (based on usage) on that infrastructure, in accordance with the Contributions Study prepared by GHD titled, "*Thomas Mitchell Drive Contributions Study, March 2014*" (or its latest version), unless otherwise agreed with the Secretary.

    For Thomas Mitchell Drive, the contributions must:
    (a) be paid to Council by 31 December 2014 for the upgrade works; and
    (b) be paid to Council in accordance with the maintenance schedule established in accordance with the Contributions Study during the life of the project,

    unless otherwise agreed with Council.

    For the Thomas Mitchell Drive/Denman Road intersection, the contributions must be paid to the relevant road authority undertaking the works (or if another mining company is undertaking the works, to that mining company) by 30 June 2016, unless otherwise agreed with the Secretary.

    Note: In making a determination about the applicable contribution/s under this condition, the Secretary shall take into account the contributions already paid and currently required to be paid towards the upgrade and maintenance of the local road network to the west of Muswellbrook under this approval and any associated Voluntary Planning Agreement with Council.

Other Road Upgrades and Maintenance

46. The Proponent must upgrade:
    (a) the Bengalla Link Road intersections with Wybong Road and Denman Road, to the satisfaction of the RMS and Council, in conjunction with the construction of the Bengalla Link Road extension and prior to carrying out any development on site apart from the defined early works;
    (b) Wybong Road and its intersection with the mine access road to the satisfaction of Council, prior to carrying out any development on site apart from the defined early works;
    (c) the Golden Highway/Wybong Road intersection to the satisfaction of the RMS, prior to carrying out any development on site apart from the defined early works, unless otherwise agreed by the Secretary;
    (d) lighting and signposting of the relevant intersections to the satisfaction of the RMS/Council, in conjunction with the relevant intersection upgrades;

(e) all bus stops affected by the proposal to the satisfaction of Council, prior to carrying out any development on site apart from the defined early works; and
(f) the Wybong Road intersections with Wybong Post Office Road and Yarraman Road to the satisfaction of Council, by the end of April 2013, or as otherwise agreed by the Secretary.

With regard to the Wybong Road upgrade identified in (b) above, the Proponent must:
(i) reassess and rectify the identified defects in the road upgrade works to the satisfaction of Council, by the end of April 2013, unless otherwise agreed by the Secretary in consultation with Council;
(ii) implement the additional recommendations identified in the 'Hyder Report', including improvements to curves, clear zones and intersection safety, and investigate and implement measures to improve safety at 'Bus Stop 2', to the satisfaction of Council by the end of April 2013, unless otherwise agreed by the Secretary in consultation with Council; and
(iii) contribute to the maintenance of the upgraded road for the life of the mining operations in accordance with the terms of the planning agreement required in condition 12 of schedule 2.

If there are any disputes in relation to these upgrade and maintenance works, then either party may refer the matter to the Secretary for resolution.

Note: For the purposes of this condition:
1. the Wybong Road upgrade refers to the section of Wybong Road from the mine access road to the intersection with Bengalla Link Road; and
2. the 'Hyder Report' means the report titled Mangoola Coal Project: Road Design, Safety and Traffic review of Wybong Road West, prepared by Hyder Consulting, dated November 2011.

47. The Proponent must undertake the following in relation to the section of Wybong Road between the Golden Highway and the mine access road:
(a) undertake a road condition survey, in consultation with Council and to the satisfaction of the Secretary, prior to carrying out any development on site;
(b) maintain the road to the satisfaction of Council, from the commencement of project-related works until the Bengalla Link Road extension is commissioned;
(c) undertake a second road condition survey, in consultation with Council and to the satisfaction of the Secretary, following the completion and commissioning of the Bengalla Link Road extension; and
(d) following approval of the second road condition survey, repair the road to at least the condition determined by the initial survey, to the satisfaction of Council.

The road condition surveys must be undertaken by a suitably qualified expert/s whose appointment/s have been approved by the Secretary.

48. No project related traffic shall use Reedy Creek Road, Mangoola Road (apart from that section forming part of Construction Route 1 during construction of the project pipeline), Roxburgh Road or Castlerock Road to get to or from the site, except in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

No project-related heavy vehicle traffic shall use Wybong Road west of the mine access road (to the intersection with the Golden Highway) to access the site, except in any emergency to avoid the loss of lives, property and/or prevent environmental harm.

Note: This condition does not apply to any employees that may reside on Reedy Creek Road, Mangoola Road, Roxburgh Road or Castlerock Road, or the infrequent use of the roads for consultation, environmental monitoring, and inspection and maintenance of nearby infrastructure.

Train Movements and Refuelling

49. The Proponent must:
(a) restrict train movements to/from site to a maximum of 20 train movements a day (ie. 10 trains in; 10 trains out);
(b) use its reasonable endeavours to ensure that its rail spur is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with noise limits L6.1 to L6.4 in RailCorp's EPL (No. 12208); and
(c) only refuel trains on site that are directly associated with the coal transport operations of the project.

VISUAL IMPACT

Additional Visual Impact Mitigation

50. Within 12 months of this approval, the Proponent must prepare a report that:

(a) identifies the residences that are likely to experience significant visual impacts during the construction and operation of the project; and
(b) describes (in general terms) the additional mitigation measures that could be implemented to reduce the visibility of the mine from these residences,

to the satisfaction of the Secretary.

51. Within 3 months of the Secretary approving this report, the Proponent must advise all owners of residences identified in the report that they are entitled to additional mitigation measures to reduce the visibility of the mine from their properties.

52. Upon receiving a written request from an owner of a residence identified in this report, the Proponent must implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) in consultation with the landowner, and to the satisfaction of the Secretary.

These mitigation measures must be reasonable and feasible.

If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

Note: The additional visual impact mitigation measures must be aimed at reducing the visibility of the mine from significantly affected residences and do not necessarily require measures to reduce visibility of the mine from other locations on the affected properties. The additional visual impact mitigation measures do not necessarily have to include measures on the affected property itself (i.e. the additional measures may consist of measures outside the affected property boundary that provide an effective reduction in visual impacts).

53. By July 2010 the Proponent must plant a vegetation screen from the north of view point 3 to view point 4, as identified in Appendix 7. The Proponent must maintain the vegetation screen for the life of the project.

Visual Amenity

54. The Proponent must:
(a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project; and
(b) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version,

to the satisfaction of the Secretary.

GREENHOUSE GAS

Energy Savings Action Plan

55. The Proponent must prepare an Energy Savings Action Plan for the project to the satisfaction of the Secretary. This plan must be prepared in accordance with the requirements and guidelines of DPI Water, and submitted to the Secretary for approval prior to starting mining operations on site.

The Proponent must implement the approved action plan as approved from time to time by the Secretary.

Monitoring and Reporting

56. The Proponent must:
(a) monitor the greenhouse gas emissions generated by the project;
(b) investigate ways to reduce greenhouse gas emissions generated by the project; and
(c) report on greenhouse gas monitoring and abatement measures in the Annual Review,

to the satisfaction of the Secretary.

WASTE MINIMISATION

57. The Proponent must:
(a) monitor the amount of waste generated by the project;
(b) implement reasonable and feasible measures to minimise waste generated by the project;
(c) ensure irrigation of treated wastewater is undertaken in accordance with EPA's *Environmental Guideline for the Utilisation of Treated Effluent*;
(d) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
(e) report on waste management and minimisation in the Annual Review,

to the satisfaction of the Secretary.

REHABILITATION

Rehabilitation Objectives

58. The Proponent must rehabilitate the site to the satisfaction of the Executive Director Mineral Resources. The rehabilitation must comply with the objectives in Table 12, and be consistent with the conceptual rehabilitation plans in Appendix 5.

Table 12: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole)	• Safe, stable and non-polluting • Final landforms designed to incorporate natural micro-relief and natural drainage lines • Restore self-sustaining ecosystems, including establishing: o appropriate native woodland species; and o at least 700 hectares of native grassland, in the final rehabilitated landscape.
Final voids	• Designed as long term groundwater sinks and to maximise groundwater flows across back-filled pits to the final void • Minimise to the greatest extent practicable: o the size and depth of final voids o the drainage catchment of final voids o any high wall instability risk o risk of flood interaction for all flood events up to and including the Probable Maximum Flood.
Anvil Creek realignment	• Restore self-sustaining ecological and hydrological function of the creek.
Surface infrastructure	• To be decommissioned and removed, unless the Executive Director Mineral Resources agrees otherwise.
Community	• Ensure public safety • Minimise the adverse socio-economic effects associated with mine closure.

Progressive Rehabilitation

59. The Proponent must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.

Rehabilitation Management Plan

60. The Proponent must prepare a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director, Mineral Resources. This plan must:
(a) submitted to the Executive Director, Mineral Resources for approval by 30 September 2014;
(b) be prepared in consultation with the Department, DPI Water, OEH and Council;
(c) be prepared in accordance with any relevant DRE guideline;
(d) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;
(e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);
(f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final landform including final voids, and final land use;
(g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;
(h) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and
(i) build to the maximum extent practicable on other management plans required under this approval.

The Proponent must implement the approved management plan as approved from time to time by the Secretary.

SCHEDULE 4
ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. Within 1 month of this approval, the Proponent must:
   (a) notify in writing the owners of:
      - any residence on the land listed in Table 2 of schedule 3 that they have the right to request the Proponent to ask for additional noise mitigation measures to be installed at their residence at any stage during the project; and
      - any privately-owned land within 2 kilometres of the approved open cut mining pit/s that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;

   (b) notify the tenants of any mine-owned land of their rights under this approval; and
   (c) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EA identify that dust emissions generated by the project are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the project.

2. Prior to entering into any tenancy agreement for any land owned by the Proponent that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 2 that is subsequently purchased by the Proponent, the Proponent must:
   (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
   (b) advise the prospective tenants of the rights they would have under this approval,

   to the satisfaction of the Secretary.

3. As soon as practicable after obtaining monitoring results showing:
   (a) an exceedance of any relevant criteria in schedule 3, the Proponent must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the project is again complying with the relevant criteria; and
   (b) an exceedance of the relevant air quality criteria in schedule 3, the Proponent must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).

INDEPENDENT REVIEW

4. If a landowner considers the project to be exceeding the impact assessment criteria in schedule 3, except where this is predicted in the EA, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land.

   If the Secretary is satisfied that an independent review is warranted, the Proponent must within 3 months of the Secretary advising that an independent review is warranted:
   (a) consult with the landowner to determine his/her concerns;
   (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to conduct monitoring on the land, to determine whether the project is complying with the relevant impact assessment criteria in schedule 3, and identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and
   (c) give the Secretary and landowner a copy of the independent review.

5. If the independent review determines that the project is complying with the relevant impact assessment criteria in schedule 3, then the Proponent may discontinue the independent review with the approval of the Secretary.

6. If the independent review determines that the project is not complying with the relevant impact assessment criteria in schedule 3, and that the project is primarily responsible for this noncompliance, then the Proponent must:
   (a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria; and
   (b) conduct further monitoring to determine whether these measures ensure compliance; or
   (c) secure a written agreement with the landowner to allow exceedances of the criteria in schedule 3,

   to the satisfaction of the Secretary.

If the additional monitoring referred to above subsequently determines that the project is complying with the relevant criteria in schedule 3, then the Proponent may discontinue the independent review with the approval of the Secretary.

If the Proponent is unable to finalise an agreement with the landowner, then the Proponent or landowner may refer the matter to the Secretary for resolution.

If the matter cannot be resolved within 21 days, the Secretary shall refer the matter to an Independent Dispute Resolution Process (see Appendix 9).

If the measures referred to in (a) do not achieve compliance with the air quality and/or noise land acquisition criteria in schedule 3, and the Proponent cannot secure a written agreement with the landowner to allow these exceedances within 3 months, then the Proponent must, upon receiving a written request from the landowner, acquire all or part of the landowner's land in accordance with the procedures in conditions 10-11 below.

7. If the independent review determines that the relevant criteria in schedule 3 are being exceeded, but that more than one mine is responsible for this non-compliance, then the Proponent must, together with the relevant mine/s:
(a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the relevant criteria are complied with; and
(b) conduct further monitoring to determine whether these measures ensure compliance; or
(c) secure a written agreement with the landowner and other relevant mines to allow exceedances of the criteria in schedule 3,
to the satisfaction of the Secretary.

If the additional monitoring referred to above subsequently determines that the projects are complying with the relevant criteria in schedule 3, then the Proponent may discontinue the independent review with the approval of the Secretary.

If the Proponent is unable to finalise an agreement with the landowner and/or other mine/s, then the Proponent or landowner may refer the matter to the Secretary for resolution.

If the matter cannot be resolved within 21 days, the Secretary shall refer the matter to an Independent Dispute Resolution Process (see Appendix 9).

If the measures referred to in (a) do not achieve compliance with the air quality and/or noise land acquisition criteria in schedule 3, and the Proponent together with the relevant mine/s cannot secure a written agreement with the landowner to allow these exceedances within 3 months, then upon receiving a written request from the landowner, the Proponent must acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s, in accordance with the procedures in conditions 10-11 below.

8. If the landowner disputes the results of the independent review, either the Proponent or the landowner may refer the matter to the Secretary for resolution. If the matter cannot be resolved within 21 days, the Secretary shall refer the matter to an Independent Dispute Resolution Process.

9. If, following the Independent Dispute Resolution Process, the Secretary decides that the Proponent must acquire all or part of the landowner's land, then the Proponent must acquire this land in accordance with the procedures in conditions 10-11 below.

LAND ACQUISITION

10. Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent must make a binding written offer to the landowner based on:
(a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the project the subject of the project application, having regard to the:
- existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
- presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the 'additional noise mitigation measures' in condition 4 of schedule 3;

(b) the reasonable costs associated with:
- relocating within the Muswellbrook local government area, or to any other local government area determined by the Secretary;

- obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and

(c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Proponent and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution.

Upon receiving such a request, the Secretary shall request the President of the NSW Division of the Australian Property Institute (API) to appoint a qualified independent valuer to:

(a) consider submissions from both parties;
(b) determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;
(c) prepare a detailed report setting out the reasons for any determination; and
(d) provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer's report, the Proponent must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary shall determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report and the detailed report of the party that disputes the independent valuer's determination.

Within 14 days of the Secretary's determination, the Proponent must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.

If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Secretary determines otherwise.

11. The Proponent must pay all reasonable costs associated with the land acquisition process described in condition 10 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of Registrar-General.

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, AUDITING AND REPORTING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Proponent must prepare an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must:
   (a) be submitted to the Secretary for approval prior to the commencement of any development on the site;
   (b) provide the strategic framework for environmental management of the project;
   (c) identify the statutory approvals that apply to the project;
   (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
   (e) describe the procedures that would be implemented to:
      - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
      - receive, handle, respond to, and record complaints;
      - resolve any disputes that may arise;
      - respond to any non-compliance;
      - respond to emergencies; and
   (f) include:
      - copies of any strategies, plans and programs approved under the conditions of this approval; and
      - a clear plan depicting all the monitoring to be carried out in relation to the project.

   The Proponent must implement the approved management strategy as approved from time to time by the Secretary.

Adaptive Management

2. The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

   Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:
   (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
   (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
   (c) implement remediation measures as directed by the Secretary,

   to the satisfaction of the Secretary.

Management Plan Requirements

3. The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
   (a) detailed baseline data (where available);
   (b) a description of:
      - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
      - any relevant limits or performance measures/criteria;
      - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
   (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
   (d) a program to monitor and report on the:
      - impacts and environmental performance of the project;
      - effectiveness of any management measures (see c above);
   (e) a program to investigate and implement ways to improve the environmental performance of the project over time;
   (f) a protocol for managing and reporting any:

- incidents;
- complaints;
- non-compliances with statutory requirements; and
- exceedances of the impact assessment criteria and/or performance criteria; and

(g) a protocol for periodic review of the plan.

REPORTING

Incident Reporting

4. The Proponent must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Proponent must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

5. The Proponent must provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.

ANNUAL REVIEW

6. By the end of March each year, or other timing as may be agreed by the Secretary, the Proponent must submit a report to the Department reviewing the environmental performance of the project to the satisfaction of the Secretary. This review must:
   (a) describe the development that was carried out in the previous calendar year, and the development that is proposed to be carried out over the next year;
   (b) include a comprehensive review of monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against the:
      - relevant statutory requirements, limits or performance measures/criteria;
      - monitoring results of previous years; and
      - relevant predictions in the documents listed in condition 2 of Schedule 2;
   (c) identify any non-compliance over the last year, and describe what actions were(or are being) taken to ensure compliance;
   (d) identify any trends in monitoring data over the life of the project;
   (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
   (f) describe what measures will be implemented over the next year to improve the environmental performance of the project.

AUDITING

7. Within 2 years of this approval, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
   (a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Secretary;
   (b) include consultation with the relevant agencies;
   (c) assess the environmental performance of the project, and its effects on the surrounding environment and whether it is complying with the requirements in this approval, and any other relevant approvals, relevant EPL/s and/or Mining Lease (including any assessment, plan or program required under these approvals);
   (d) review the adequacy of any approved strategy/plan/program required under this approval; and, if necessary,
   (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and
   (f) be conducted and reported to the satisfaction of the Secretary.

   Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

8. Within 12 weeks of commissioning this audit, or as otherwise agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary with a response to any recommendations contained in the audit report.

Revision of Strategies, Plans and Programs

9. Within 3 months:
   (a) the submission for audit under condition 7 above;
   (b) the submission for Annual Review under condition 6 above;
   (c) the submission for incident report under condition 4 above; and
   (d) any modification to the conditions of this approval,

   the Proponent must review, and if necessary revise, the strategies, plans, programs and reports required under this approval to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval.

   Note: This is to ensure the strategies, plans, programs and reports are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

COMMUNITY CONSULTATIVE COMMITTEE

10. The Proponent must operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. This CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version).

    Notes: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.

    The CCC should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community.

ACCESS TO INFORMATION

11. The Proponent must:
    (a) make the following information publicly available on its website:
    - the documents listed in condition 2 of Schedule 2;
    - current statutory approvals for the project;
    - approved strategies, plans or programs required under the conditions of this approval;
    - a comprehensive summary of the compliance monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
    - a complaints register, which is to be updated on a monthly basis;
    - minutes of CCC meetings;
    - the last five annual reviews;
    - any independent environmental audit; and the Proponent's response to the recommendations in any audit; and

    (b) keep this information up to date;

    to the satisfaction of the Secretary.

    Note: The information on the Proponent's website must be updated at least every quarter, but as far as possible, information under this condition should be made publicly available more frequently to ensure the community has access to the most up to date information about the performance of the project.

APPENDIX 1
SCHEDULE OF LAND

Lot	DP	Owner
12	842072	Mangoola Coal Operations Pty Ltd
160	750968	Mangoola Coal Operations Pty Ltd
11	842072	Mangoola Coal Operations Pty Ltd
227	750968	Mangoola Coal Operations Pty Ltd
199	750968	Mangoola Coal Operations Pty Ltd
193	750968	Mangoola Coal Operations Pty Ltd
185	750924	Mangoola Coal Operations Pty Ltd
31	735121	Mangoola Coal Operations Pty Ltd
7004	931189	The State of New South Wales
2170	706389	Mangoola Coal Operations Pty Ltd
188	750924	Mangoola Coal Operations Pty Ltd
912	588390	Mangoola Coal Operations Pty Ltd
911	588390	Mangoola Coal Operations Pty Ltd
218	750968	Mangoola Coal Operations Pty Ltd
201	706571	Mangoola Coal Operations Pty Ltd
163	750968	Mangoola Coal Operations Pty Ltd
162	750968	Mangoola Coal Operations Pty Ltd
93	750968	Mangoola Coal Operations Pty Ltd
1	1014899	Mangoola Coal Operations Pty Ltd
62	750968	Mangoola Coal Operations Pty Ltd
46	750968	Mangoola Coal Operations Pty Ltd
45	750968	Mangoola Coal Operations Pty Ltd
42	750968	Mangoola Coal Operations Pty Ltd
41	750968	Mangoola Coal Operations Pty Ltd
40	750968	Mangoola Coal Operations Pty Ltd
39	750968	Mangoola Coal Operations Pty Ltd
216	750968	Mangoola Coal Operations Pty Ltd
215	750968	Mangoola Coal Operations Pty Ltd
212	750968	Mangoola Coal Operations Pty Ltd
211	750968	Mangoola Coal Operations Pty Ltd
210	750968	Mangoola Coal Operations Pty Ltd
209	750968	Mangoola Coal Operations Pty Ltd
205	750968	Mangoola Coal Operations Pty Ltd
204	750968	Mangoola Coal Operations Pty Ltd
196	750968	Mangoola Coal Operations Pty Ltd
192	750968	Mangoola Coal Operations Pty Ltd
191	750968	Mangoola Coal Operations Pty Ltd
190	750968	Mangoola Coal Operations Pty Ltd
189	750968	Mangoola Coal Operations Pty Ltd
88	750968	Mangoola Coal Operations Pty Ltd
230	869334	Mangoola Coal Operations Pty Ltd
257	706955	Mangoola Coal Operations Pty Ltd
23	622786	Mangoola Coal Operations Pty Ltd
155	750968	Mangoola Coal Operations Pty Ltd
195	750968	Mangoola Coal Operations Pty Ltd
194	750968	Mangoola Coal Operations Pty Ltd
2171	706389	Mangoola Coal Operations Pty Ltd
11	112946	Mangoola Coal Operations Pty Ltd
23	8090	Mangoola Coal Operations Pty Ltd
22	8090	Mangoola Coal Operations Pty Ltd
21	8090	Mangoola Coal Operations Pty Ltd
101	805458	Mangoola Coal Operations Pty Ltd
41	805505	Mangoola Coal Operations Pty Ltd
13	842072	Mangoola Coal Operations Pty Ltd
229	726283	The State of New South Wales
173	750968	Mangoola Coal Operations Pty Ltd
41	850807	Mangoola Coal Operations Pty Ltd
12	230283	Mangoola Coal Operations Pty Ltd
112	531273	Mangoola Coal Operations Pty Ltd
111	531273	Mangoola Coal Operations Pty Ltd

Lot	DP	Owner
100	805458	Mangoola Coal Operations Pty Ltd
22	622786	Mangoola Coal Operations Pty Ltd
21	622786	Mangoola Coal Operations Pty Ltd
32	735121	Mangoola Coal Operations Pty Ltd
42	805505	Mangoola Coal Operations Pty Ltd
1	950763	Mangoola Coal Operations Pty Ltd
634	748470	Mangoola Coal Operations Pty Ltd
633	748470	Mangoola Coal Operations Pty Ltd
32	750968	Mangoola Coal Operations Pty Ltd
156	750968	Mangoola Coal Operations Pty Ltd
4	729944	Mangoola Coal Operations Pty Ltd
62	833005	Mangoola Coal Operations Pty Ltd
47	750968	Mangoola Coal Operations Pty Ltd
177	750968	Mangoola Coal Operations Pty Ltd
1	121350	Mangoola Coal Operations Pty Ltd
1	1003300	Mangoola Coal Operations Pty Ltd
23	1108520	Mangoola Coal Operations Pty Ltd
18	996754	Mangoola Coal Operations Pty Ltd
1	995693	Mangoola Coal Operations Pty Ltd
12	594674	Mangoola Coal Operations Pty Ltd
178	750924	Mangoola Coal Operations Pty Ltd
179	750924	Mangoola Coal Operations Pty Ltd
1	360377	Mangoola Coal Operations Pty Ltd
36	750924	Mangoola Coal Operations Pty Ltd
63	750924	Mangoola Coal Operations Pty Ltd
4	587737	Mangoola Coal Operations Pty Ltd
256	706955	Mangoola Coal Operations Pty Ltd
24	8090	Mangoola Coal Operations Pty Ltd
5	260132	Mangoola Coal Operations Pty Ltd
40	850807	Mangoola Coal Operations Pty Ltd
1593	809469	Mangoola Coal Operations Pty Ltd
20	711164	Mangoola Coal Operations Pty Ltd
2	567385	Mangoola Coal Operations Pty Ltd
5	845723	Mangoola Coal Operations Pty Ltd
1	845723	Mangoola Coal Operations Pty Ltd
4	555166	Mangoola Coal Operations Pty Ltd
13	577026	Mangoola Coal Operations Pty Ltd
176	750915	Mangoola Coal Operations Pty Ltd
14	750915	Mangoola Coal Operations Pty Ltd
193	750915	Mangoola Coal Operations Pty Ltd
121	585122	Mangoola Coal Operations Pty Ltd
2	807266	Mangoola Coal Operations Pty Ltd
79	750969	Mangoola Coal Operations Pty Ltd
6	750969	Mangoola Coal Operations Pty Ltd
1	845915	Mangoola Coal Operations Pty Ltd
2	845915	Mangoola Coal Operations Pty Ltd
3	845915	Mangoola Coal Operations Pty Ltd
503	521969	Mangoola Coal Operations Pty Ltd
49	750968	Mangoola Coal Operations Pty Ltd
502	521971	Mangoola Coal Operations Pty Ltd

Other Lands

Crown Roads, Council Roads, the bed and banks of the Hunter River and the Muswellbrook – Ulan railway, identified in the area shown on Figure 1 – Project Application Boundary

Legend

- Approved Project Disturbance Boundary
- Mining Lease 1626 Boundary
- Modified Project Disturbance Boundary
- Titles in s.75W Modification Area
- Proposed 500kV Transmission Line Easement
- Cadastral Boundary
- Private Residence
- Mine Owned Residence

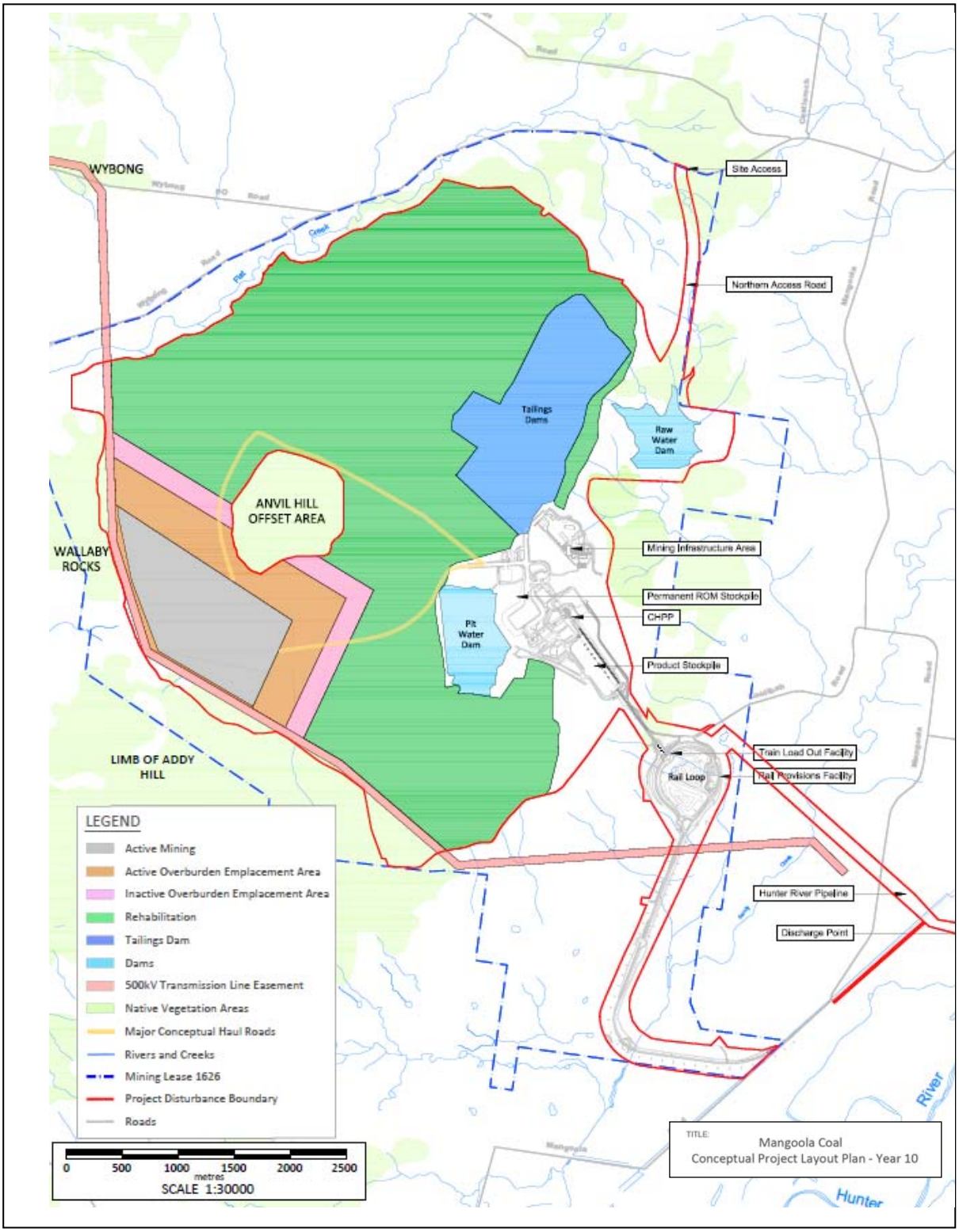
Land Ownership Status:

- Xstrata Mangoola Pty Limited
- Crown Land
- The State of NSW
- Private
- Commonwealth of Australia

FIGURE A2.1

s.75W Modification
Schedule of Lands

APPENDIX 2
PROJECT LAYOUT PLAN

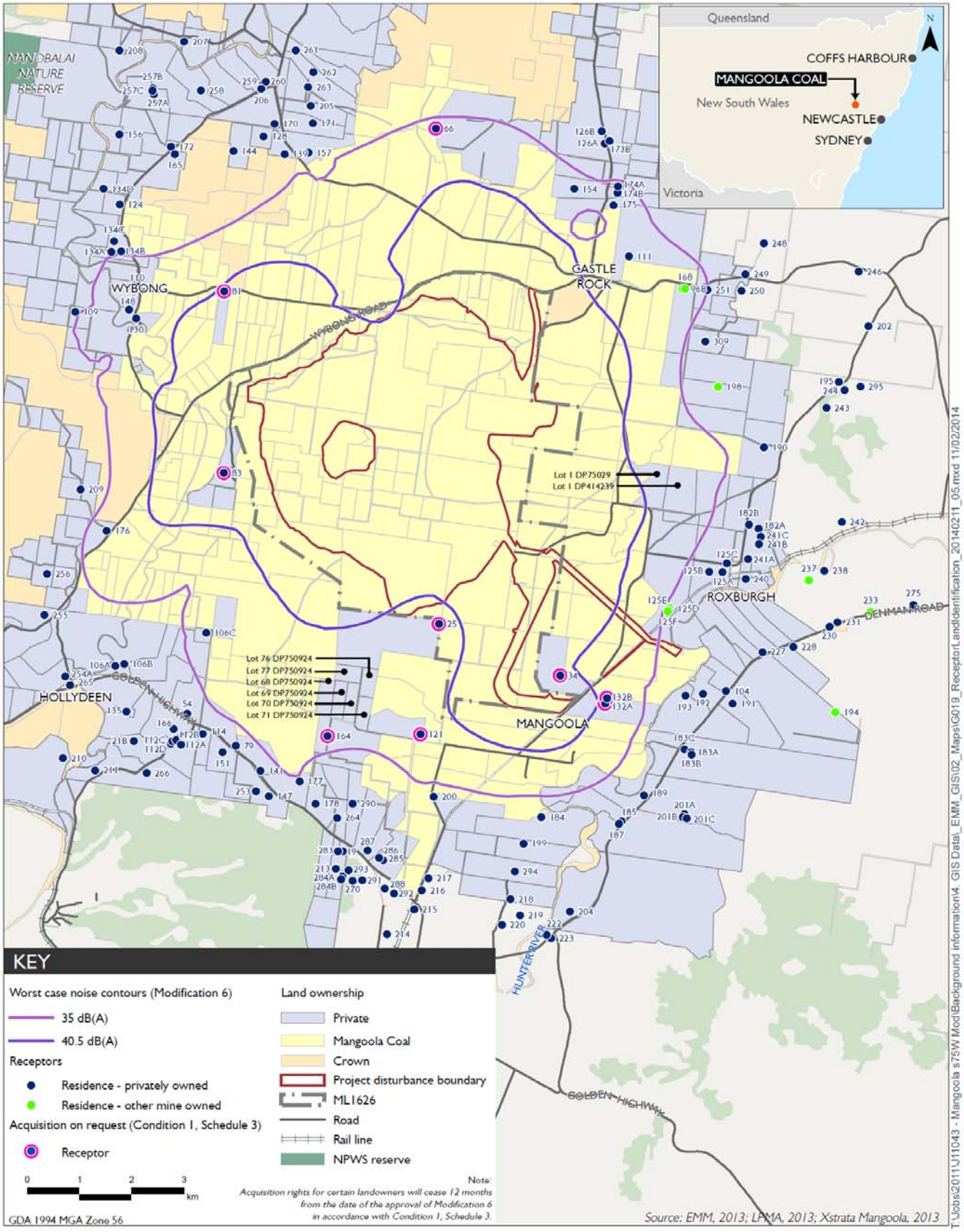


APPENDIX 3
GENERAL TERMS FOR THE REVISED PLANNING AGREEMENT

Funding Area	Project	Proponent Contribution[2]	Funding Time Frame	Contribution Origin
Roads	Wybong Road maintenance[1] (as required under condition 50 of schedule 3)	$55,000 a year during mining operations[3], following upgrade of Wybong Road as required under condition 50 of schedule 3	Annually[4]	MOD 4
	General road maintenance	$220,000 a year during mining operations[3]	Annually[4]	MOD 4
Local Environmental Management	Wybong Uplands Land Management Strategy	$500,000	$100,000 x 5 years, from commencement of construction.	Original project approval
	Council environmental management and monitoring	$20,000 a year during mining operations[3]	Annually[4]	MOD 4
Local Employment	Education and Training Strategy	$600,000	3 – 6 annual contributions to be paid from commencement of construction.	Original project approval
	Local Apprenticeships	Proponent to use its best endeavours to engage 6 apprentices a year sourced from residents within the Muswellbrook Shire and Aberdeen	Annually[4]	MOD 4
Community Projects	Recreation Assets Renewal Fund	$1,200,000	Contributions to start on commencement of production, with flexible instalments. and interest on the capital outstanding to be contributed annually.	Original project approval
Community Infrastructure	Denman recreation area enhancements	$2,200,000	3-4 annual contributions to be paid from commencement of production, with a weighting towards the latter contributions in accordance with Council's schedule of works.	Original project approval
Additional Environmental and Community Projects	Miscellaneous	$235,000 a year during mining operations[3]	Annually[4]	MOD 4
Additional Environmental and Community Projects	Miscellaneous	$100,000 a year during mining operations[3]	Annually[5]	MOD 6

1. Refers to the section of Wybong Road from the mine access road to the intersection with the Bengalla Link Road.
2. Subject to detailed timing, CPI indexation and termination as detailed in the Proponent's Letter of Offer dated 30 March 2012 (the Letter of Offer)
3. Including 12 months after the end of mining operations, as detailed in the Letter of Offer
4. From the date of approval of MOD 4, as detailed in the Letter of Offer
5. From the date of approval of MOD 6.

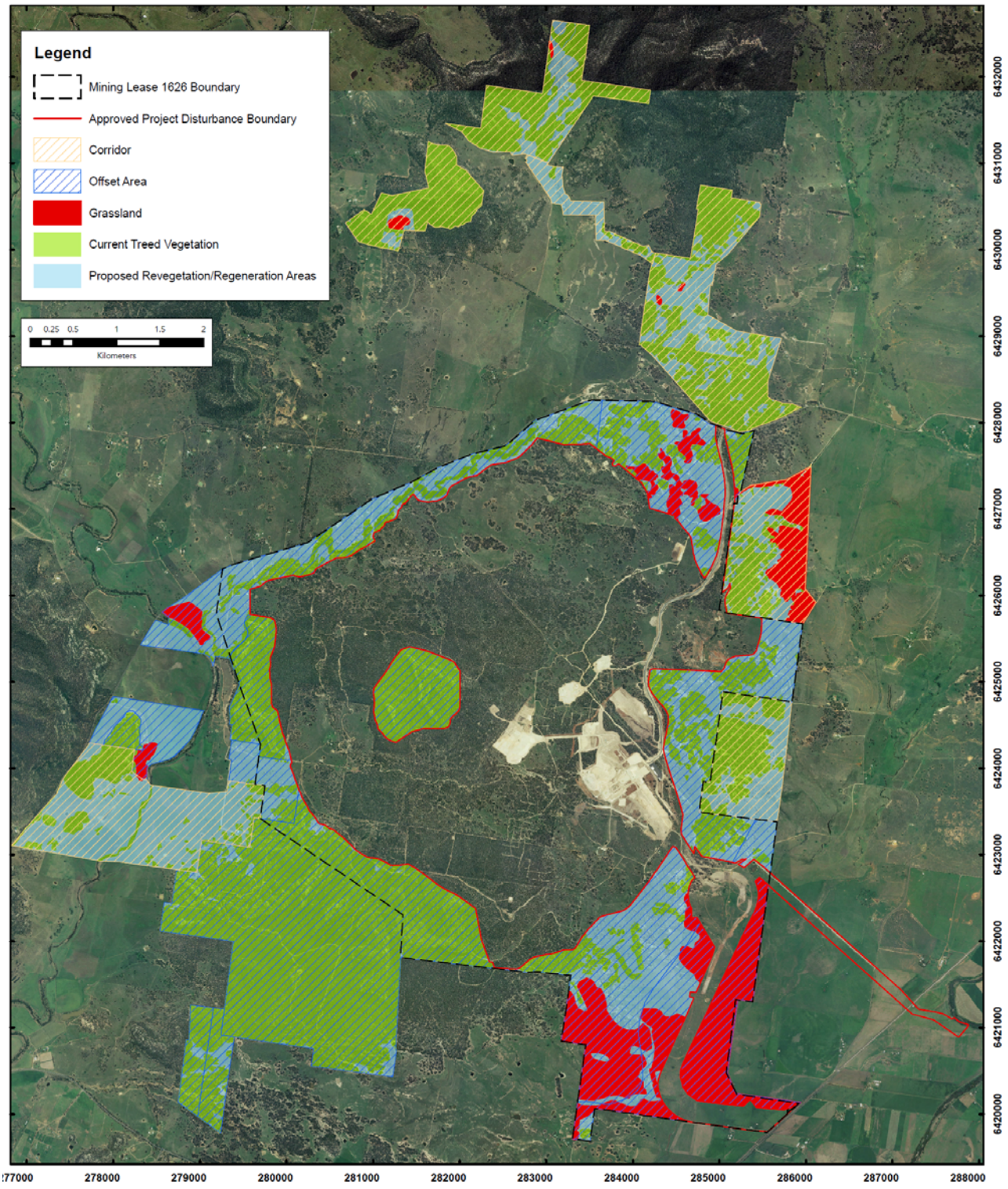
APPENDIX 4
LAND OWNERSHIP

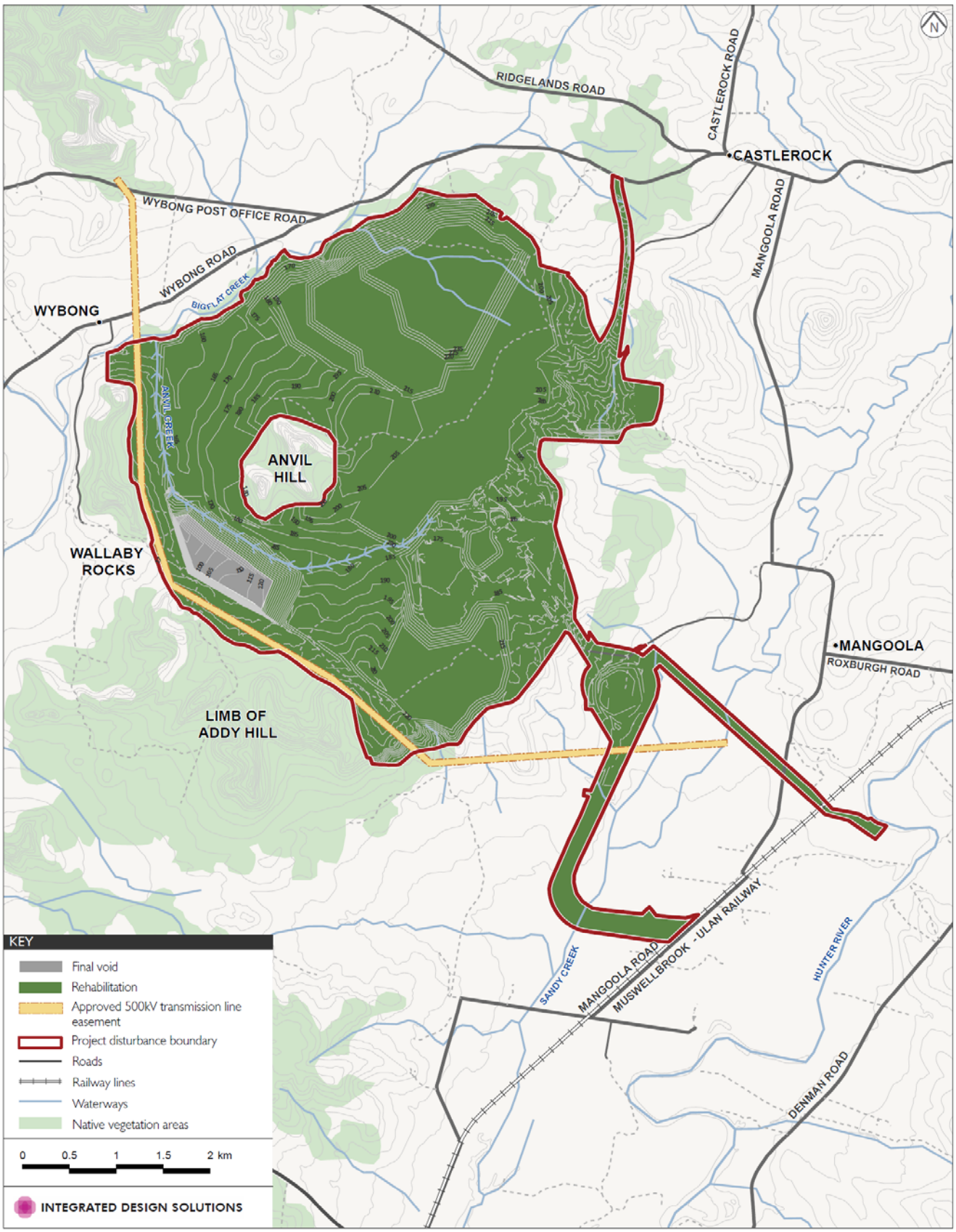


Receptor/land identification

GLENCORE

Mangoola Coal
Appendix 6 - Offset and Corridor Concept Plan

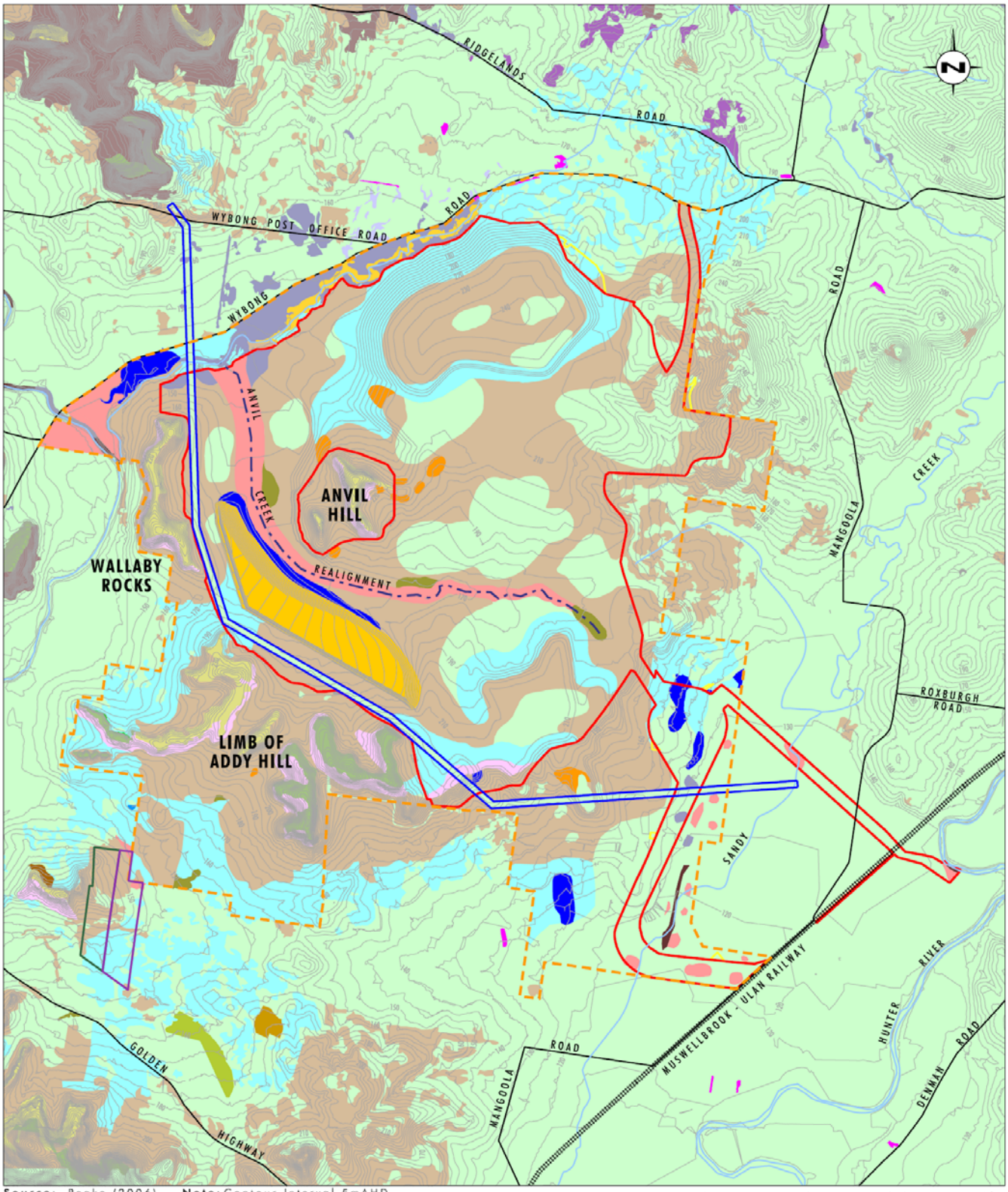




Proposed mine plan - Final landform

Mangoola Coal Modification 6 Environmental Assessment

Figure 4.4



Source: Peake (2006) Note: Contour Interval 5mAHD

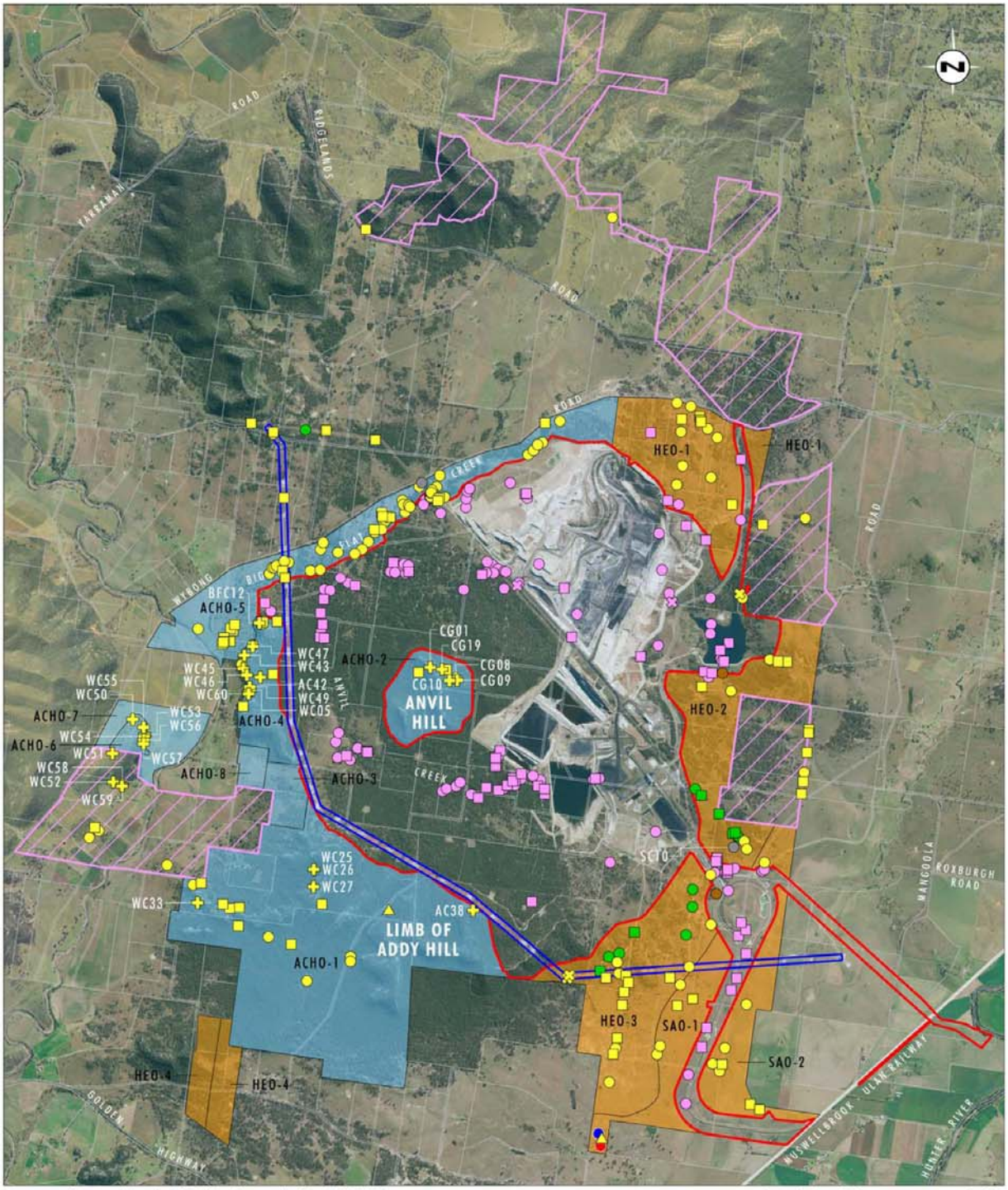
0 1 0 2 0 3km

Legend

- Approved Project Disturbance Boundary
- Proposed 500kV Transmission Line Easement
- Modified Project Disturbance Boundary
- Combined Ecology Offset Boundary
- Proposed ETL Relocation Offset Area
- Proposed Mod. Additional Biodiversity Offset Area
- Ironbark-Wattle Low Exposed Woodland Complex
- Forest Red Gum Riparian Woodland
- Mixed Species Revegetation/Plantation
- Disturbed/Modified Native Grassland
- Coast Myall Exposed Woodland
- Sheltered Grey Gum Woodland
- Improved Pasture
- Spotted Gum Open Forest
- Swamp Oak Riparian Forest
- Vineyard
- Tall Mixed Shrubland Complex
- Drooping Sheoak Woodland
- River Oak Riparian Forest
- Exotic Rushland
- Bulloak Woodland
- Red Ash Sheltered Forest
- Cypress Pine Woodland
- Paperbark Woodland
- Slaty Box Woodland (VEC, TSC Act)
- Weeping Myall Woodland (EEC, TSC and EPBC Acts)
- Ironbark Woodland Complex (EEC, TSC Act)
- Final Void
- Rough-barked Apple Woodland (consistant with EEC, TSC Act)

DRAFT FIGURE 12.26

Post Mining Rehabilitated Vegetation Communities



Source: Dept. of Lands (2003), Mangoola Coal (2013)

0 0.5 1.0 2.5km
1:60 000

Legend

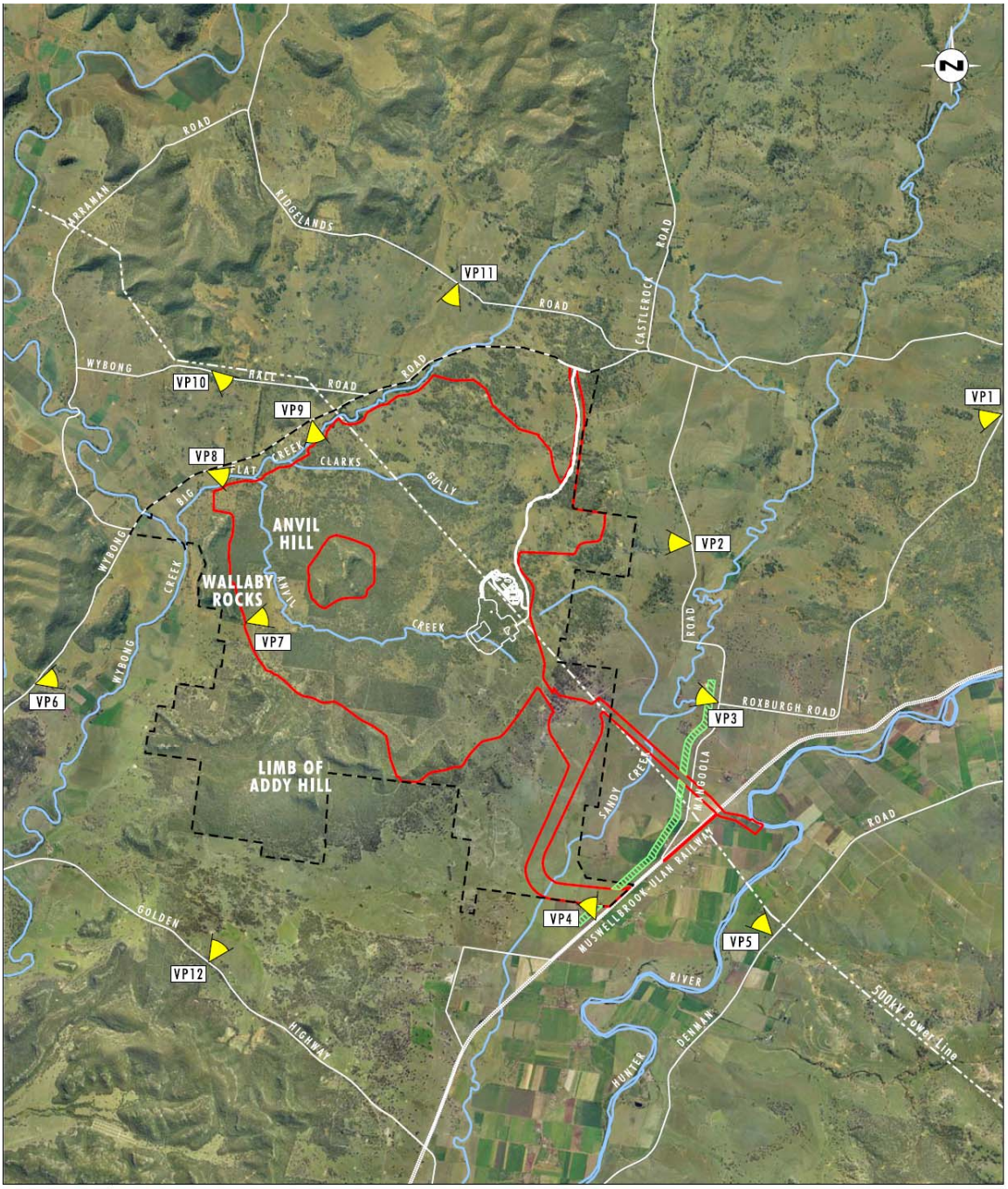
- Approved Project Disturbance Boundary
- Corridor
- Other Offset Areas
- Aboriginal Cultural Heritage Offset Areas
- Approved 500kV Transmission Line Easement
- Artefact scatter with PAD Salvaged under AHIP#3220
- Artefact scatter with PAD Valid
- Artefact scatter Salvaged under PA 06-0014
- Artefact scatter Salvaged under PA 10-0002
- Artefact scatter Valid
- Artefact scatter Valid - partial salvage only under PA06-0014
- Artefact scatter Valid - partial temporary salvage under PA 10-0002
- Isolated artefact Salvaged under PA 06-0014
- Isolated artefact Salvaged under PA 10-0002
- Isolated artefact Valid
- PAD Valid
- Rockshelter Valid
- Scarred tree Salvaged under PA 06-0014
- Scarred tree Valid

File Name (A4): 2884_161.dgn

APPENDIX 7

Location of Known Sites within Mangoola Coal Project Area

APPENDIX 7
VISUAL VEGETATION SCREEN



Source: Umwelt (2006)

0 1 2 4km
1:80 000

Legend

- Proposed Disturbance Area
- Project Area
- Viewpoint
- VP6 Viewpoint Number
- Proposed Vegetation Screening

FIGURE 4.1

Visual Assessment Locations

APPENDIX 8
NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 2 of the approval are to apply under all meteorological conditions except the following:
   (a) during periods of rain or hail;
   (b) average wind speed at microphone height exceeds 5 m/s;
   (c) wind speeds greater than 3 m/s measured at 10 m above ground level; or
   (d) temperature inversion conditions greater than 3°C/100 m, or alternatively stability class F and G.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station on or in the vicinity of the site.

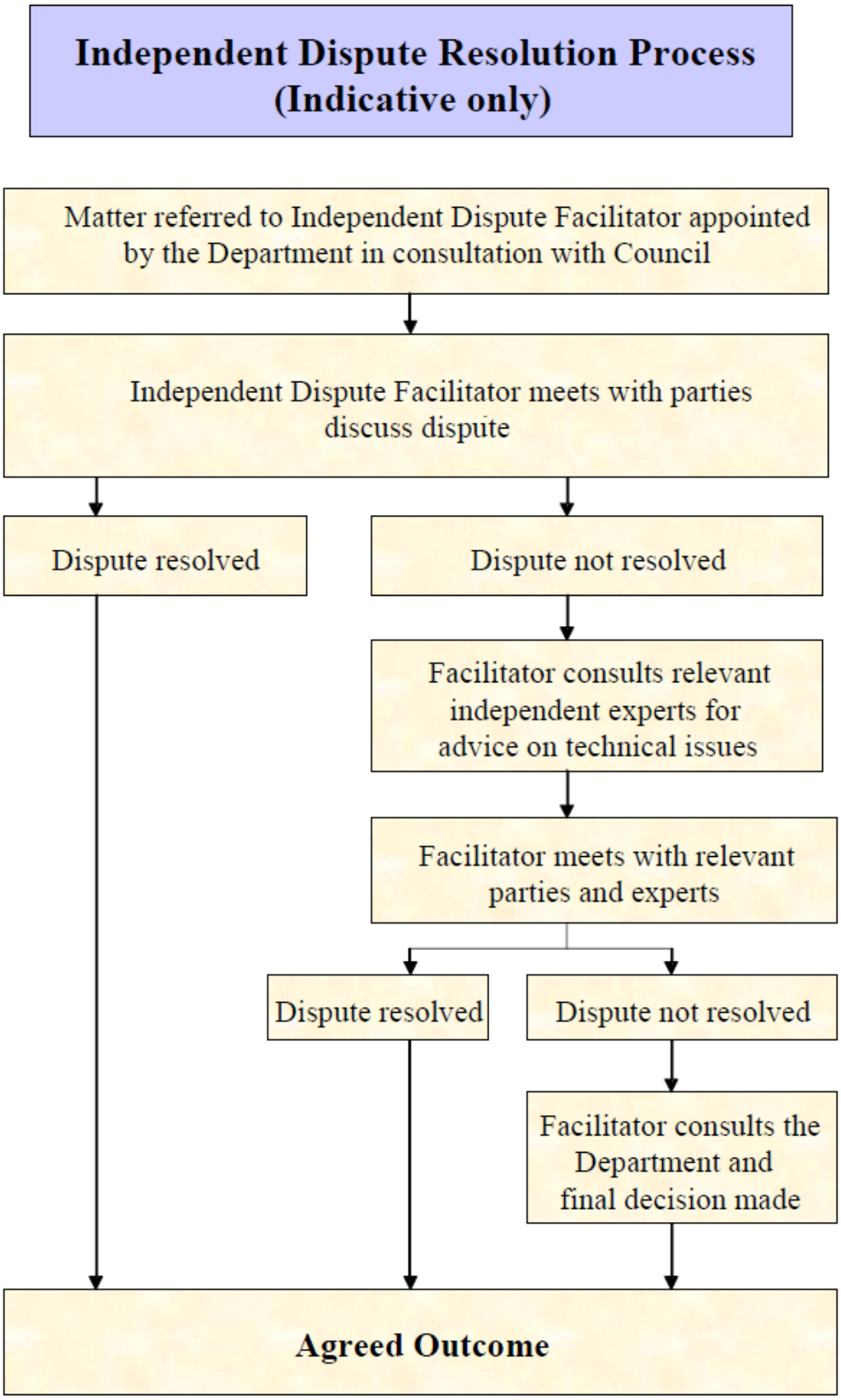
Compliance Monitoring

3. Attended monitoring is to be used to determine compliance with the relevant conditions of this approval.

4. This monitoring must be carried out at least once a month (but at least two weeks apart), unless the Secretary directs otherwise.

   Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the project.

5. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
   (a) monitoring locations for the collection of representative noise data;
   (b) meteorological conditions during which collection of noise data is not appropriate;
   (c) equipment used to collect noise date, and conformity with Australian Standards relevant to such equipment; and
   (d) modifications to noise data collected including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

APPENDIX 9

INDEPENDENT DISPUTE RESOLUTION PROCESS