

Development Consent

Section 89E of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning, the Planning Assessment Commission of NSW approves the development application referred to in schedule 1, subject to the conditions in schedules 2 to 6.

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 development.

Member of the Commission	Member of the Commission	Member of the Commission
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Sydney	2017	
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SCHEDULE 1

Application Number:

SSD-6367

Applicant:

KEPCO Bylong Australia Pty Ltd

Consent Authority:

Minister for Planning

Land:

See Appendix 1

Development:

Bylong Coal Project

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DEFINITIONS

Adaptive management	Adaptive management includes monitoring subsidence effects and impacts and, based on the results, modifying the mine plan as mining proceeds to ensure that the effects, impacts and/or associated environmental consequences remain within predicted and/or designated ranges and in compliance with the conditions of this consent
Annual review	The review required by condition 11 of Schedule 6
Applicant	KEPCO Bylong Australia Pty Ltd, or any other who seeks to carry out the development approved under this consent.
ARTC	Australian Rail Track Corporation Ltd
BCA	Building Code of Australia
Blast misfire	The failure of one or more holes in a blast pattern to initiate
Box Gum Woodland	Vegetation communities listed as 'White Box – Yellow Box – Blakely's Red Gum (Box Gum) Woodland' under the TSC Act and 'White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland' under the EPBC Act
BSAL	Biophysical Strategic Agricultural Land
Built Features	Includes and building or work erected or constructed on land, and includes dwellings and infrastructure such as any formed road, street, path, walk, or driveway; pipeline, water, sewer, telephone, gas or other service main.
CCC	Community Consultative Committee
CHPP	Coal Handling and Preparation Plant
Cliff	Continuous rock face, including overhangs, having a minimum length of 20 metres, a minimum height of 10 metres and a minimum slope of 2 to 1 (>63.4°)
Conditions of this consent	Conditions contained in Schedules 2 to 6 inclusive
Construction	The construction works for the development as described in the EIS. Construction work does not include surveys, acquisitions, fencing, investigative drilling or excavation, minor clearing, minor access roads, minor adjustments to services/utilities, works which allow isolation of the site so that access for construction can be provided (including service relocations) and establishing temporary facilities for construction (including for example an office and amenities compounds, temporary water and communications, construction compounds, materials storage compounds, maintenance workshops, testing laboratory or material stockpile areas).
Council	Mid-Western Regional Council
Date of commencement of development	The date notified to the Department by the Applicant under condition 11 of Schedule 2
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
Development	The development described in the EIS
Disturbance area	The land area described in the EIS within which surface disturbance is proposed (eg. open cut mining areas, emplacement areas, mine infrastructure areas and ancillary services), but does not include land subject to subsidence within the subsidence area
DoEE	Commonwealth Department of the Environment and Energy
DPI	Department of Primary Industries
DPI Water	The Division of Water within DPI
EIS	The environmental impact statement titled <i>Bylong Coal Project Environmental Impact Statement</i> (7 volumes) dated September 2015 and associated response to submissions titled <i>Bylong Coal Project Environmental Impact Statement Response to Submissions</i> (4 volumes) dated March 2016, and supplementary response to submissions titled <i>Bylong Coal Project Environmental Impact Statement Supplementary Response to Submissions</i> dated August 2016
EEC	Endangered ecological community, as defined under the <i>Threatened Species Conservation Act 1995</i>
Environmental Consequences	The environmental consequences of subsidence impacts, including: damage to built features; loss of surface flows to the subsurface; loss of standing pools in watercourses; adverse water quality impacts; cliff falls; rock falls; damage to Aboriginal heritage sites; impacts on terrestrial or aquatic ecology; and ponding.
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>

EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Exploration activities	Prospecting operations, as defined under the <i>Mining Act 1992</i>
Feasible	Feasible relates to engineering considerations and what is practical to build or implement
First workings	Development of main headings, longwall gate roads, related cut throughs and the like
Forests NSW	Forestry Corporation of NSW
GDE	Groundwater dependent ecosystems
Heavy vehicle	A vehicle that has a gross vehicle mass (GVM) or aggregate trailer mass (ATM) of more than 4.5 tonnes and a combination that includes a vehicle with a GVM or ATM of more than 4.5 tonnes (as defined under the Heavy Vehicle National Law (NSW))
Heritage Division	Heritage Division within OEH
Heritage item	An item as defined under the <i>Heritage Act 1977</i> and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i>
IESC	Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development
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 consent.
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in Schedule 4 of this consent 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 consent
Light Rigid Heavy Vehicle	Small trucks with a GVM of up to 8 tonnes. Any towed trailer must not weigh more than nine tonnes GVM and buses that seat more than 12 adults including the driver and a GVM up to 8 tonnes
Local Area	The geographical area within an approximate one hour commute of the site
LSC	Land and Soil Capability
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Medium Rigid Heavy Vehicle	Trucks and buses with a GVM more than eight tonnes and two axles, any towed trailer must not weigh more than nine tonnes GVM.
Mine water	Water that accumulates within, or drains from, active mining and infrastructure areas and any other areas where runoff may have come into contact with carbonaceous material
Mining company	Mining, extractive industry or petroleum company
Mining operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of coal on site
Minister	Minister for Planning and Environment, or delegate
Minor	Not very large, important or serious
Minor cliff	A continuous rock face, including overhangs, which has a: - minimum length of 20 metres and a height between 5 metres and 10 metres; and - minimum slope of 2 to 1 (>63.4°).
Mitigation	Activities associated with reducing the impacts of the development
MSC	Muswellbrook Shire Council
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NP&W Act	<i>National Parks and Wildlife Act 1974</i>
OEH	Office of Environment and Heritage
PAD	Potential Archaeological Deposit
PAF	Potentially Acid Forming
PMF	Probable Maximum Flood
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or a mining or petroleum company (or its subsidiaries)
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.
RAPs	The 27 Registered Aboriginal Parties for the development as identified in Table 21 of the EIS

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
Reasonable costs	The costs agreed between the Department and the Applicant for obtaining independent experts to review the adequacy of any aspects of the extraction plan, or where such costs cannot be agreed, the costs determined by a dispute resolution process
Rehabilitation	The restoration of land disturbed by the development to a good condition, and ensure it is safe, stable and non-polluting
Residence	For the purposes of this instrument, a residence includes existing or approved dwellings or buildings at the date of this consent, including those offering overnight accommodation
RFS	Rural Fire Service
RMS	Roads and Maritime Services
ROM	Run-of-mine
Safe, serviceable and repairable	Safe means no danger to users who are present, serviceable means available for its intended use, and repairable means damaged components can be repaired economically
Second workings	Extraction of coal from longwall panels, mini-wall panels or pillar extraction
Secretary	Secretary of the Department, or nominee
Site	All land to which the development application applies as listed in Appendix 1 and shown in Appendix 2
Soil Hydrology Techniques	Land management techniques utilised to manage water and nutrients across the landscape (including but not limited to Natural Sequence Farming, Keyline Systems or other similar land management techniques).
Steep slope	An area of land having a gradient between 1 in 3 (33% or 18.3°) and 2 in 1 (200% or 63.4°)
Subsidence	The totality of subsidence effects, subsidence impacts and environmental consequences of subsidence impacts
Subsidence Advisory	Subsidence Advisory NSW (formerly Mine Subsidence Board)
Subsidence Area	The area described in the EIS as the land area within the predicted limit of vertical subsidence, determined by the greater of the 26.5 degree angle of draw from the limit of secondary extraction and the predicted 20mm subsidence contour resulting from the extraction of the proposed longwalls, as predicted in the EIS
Subsidence effects	Deformation of the ground mass due to mining, including all mining induced ground movements, such as vertical and horizontal displacement, tilt, strain and curvature
Subsidence impacts	Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
TSC Act	<i>Threatened Species Conservation Act 1995</i>
VPA	Voluntary Planning Agreement
WAF	Workforce Accommodation Facility

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this consent, the Applicant 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 development.

TERMS OF CONSENT

2. The Applicant must carry out the development:
 - (a) generally in accordance with the EIS; and
 - (b) in accordance with the conditions of this consent.

Note: The general layout of the development is shown in Appendix 2.

3. If there is any inconsistency between the documents in condition 2 above, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Applicant must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents);
 - (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; and
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Mining Operations

5. The Applicant may carry out construction and mining operations on the site for 25 years from the date of commencement of development.

Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Secretary. Consequently, this consent 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.

Coal Extraction and Transportation

6. The Applicant must not extract more than 6.5 million tonnes of ROM coal from the site in any calendar year.
7. The Applicant must ensure that:
 - (a) all product coal is transported from the site by rail;
 - (b) no more than 10 laden trains leave the site on any one day; and
 - (c) not more than 2.2 laden trains leave the site per day on average when calculated over any calendar year.

Workforce Accommodation Facility

8. The Applicant must not construct the accommodation units at the WAF unless prior to its construction it is demonstrated, to the satisfaction of the Secretary, that there is insufficient appropriate accommodation capacity available in the local area to support the construction workforce for the development. In demonstrating this, the Applicant must submit a workforce accommodation study to the Department which:
 - a) has been prepared in consultation with Council and the CCC;
 - b) reviews the construction workforce numbers and schedule;
 - c) reviews the available short term and long term accommodation in the local area;
 - d) considers alternative mechanisms to manage accommodation for its workforce during peak tourist weekends; and
 - e) identifies the number of beds and timeframe required for the WAF, which shall not exceed 300, unless otherwise agreed by the Secretary.
9. The Applicant must decommission the accommodation units at the WAF within 6 months of the facility not being required to accommodate the construction workforce as detailed within the approved workforce accommodation study, unless otherwise agreed by the Secretary.

Notes:

- *Decommissioning and removal of the accommodation units from the WAF is to be undertaken in accordance with that described in the EIS.*
- *Some infrastructure may be retained at the facility for use during operation of the development (such as car parking, first aid facility and administrative office), as described in the EIS.*
- *In accordance with Schedule 6 condition 6, the workforce accommodation study can be submitted in stages, prior to each of the two construction phases proposed for the development as outlined in s3.2.1 of the EIS.*

10. The car parking facilities, first aid facility and administrative office can be constructed at the WAF area for use during construction, operations and closure.

NOTIFICATION OF COMMENCEMENT

11. Prior to commencing any development under this consent, the Applicant must notify the Department in writing of the date on which it will commence the development permitted under this consent.

STRUCTURAL ADEQUACY

12. The Applicant 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 Applicant is required to obtain construction and occupation certificates for the proposed building works; and*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.*

DEMOLITION

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

PROTECTION OF PUBLIC INFRASTRUCTURE

14. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage.

OPERATION OF PLANT AND EQUIPMENT

15. The Applicant must ensure that all plant and equipment used on site, or to monitor the performance of the development:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

COMMUNITY ENHANCEMENT

16. From the date of commencement of development, unless the Secretary agrees otherwise, the Applicant must maintain the VPA executed with Council.

The Applicant must use its reasonable endeavours when consulting with Council on the disbursement of VPA funding to direct funds towards community enhancement projects within the Bylong locality and surrounding area.

Notes:

The Applicant and Council have executed a VPA for the development in accordance with Division 6 of Part 4 of the EP&A Act, following exhibition of the VPA. A copy of the terms of the VPA is provided in Appendix 8.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS – UNDERGROUND MINING

SUBSIDENCE

Performance Measures – Natural and Heritage Features, etc

1. The Applicant must ensure that the development does not cause any exceedances of the performance measures in Table 1, to the satisfaction of the Secretary.

Table 1: Subsidence Impact Performance Measures – Natural and Heritage Features, etc

Feature	Performance Measure
Water Resources	
All watercourses	No greater subsidence impacts or environmental consequences than predicted in the EIS to water quality and water flows (including baseflow)
Bylong River, Growee River and Lee Creek alluvial aquifers	Negligible subsidence impacts or environmental consequences
Land	
Cliffs outside the Subsidence Area including the significant cliffs C1, C2, C3 and C4.	Negligible environmental consequences (that is occasional rockfalls, displacement or dislodgement of boulders or slabs or fracturing, that in total do not impact more than 0.5% of the total face of such cliffs within any longwall mining domain)
Cliff C5 and Cliff 24312 within the Subsidence Area	Negligible environmental consequences (that is occasional rockfalls, displacement or dislodgement of boulders or slabs or fracturing, that in total do not impact more than 0.5% of the total face of such cliffs within any longwall mining domain)
Other Cliffs within the Subsidence Area	No greater subsidence impacts or environmental consequences than predicted in the EIS
Minor cliffs Rock face features Steep slopes	No greater subsidence impacts or environmental consequences than predicted in the EIS
All other land not covered by a performance measure above	No greater subsidence impacts or environmental consequences than predicted in the EIS
Biodiversity	
Threatened species, threatened populations, or endangered ecological communities within the Subsidence Area	No greater subsidence impacts or environmental consequences than predicted in the EIS
Threatened species, threatened populations, or endangered ecological communities outside the Subsidence Area	Negligible subsidence impacts or environmental consequences
Protected Areas	
Goulburn River National Park and Wollemi National Park	Negligible subsidence impacts or environmental consequences
Heritage Sites	
Aboriginal and Historic heritage sites within the Subsidence Area	No greater subsidence impact or environmental consequences than predicted in the EIS
Aboriginal and Historic heritage sites outside the Subsidence Area	Negligible subsidence impacts or environmental consequences
Mine workings	
First workings (excluding longwall gate roads subject to secondary extraction) beneath any feature where performance measures in this table require no or negligible environmental consequences and to all first workings beneath cliffs (excluding longwall gate roads subject to secondary extraction)	Negligible subsidence impacts or environmental consequences
Second workings	To be carried out only in accordance with an approved Extraction Plan

Notes:

- The Applicant will be required to define more detailed performance indicators (including impact assessment criteria) for each of these performance measures in the various management plans that are required under this consent (see condition 6 of this Schedule below).
- Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which

the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Secretary will be the final arbiter.

Offsets

2. If the Applicant exceeds the performance measures in Table 1 and the Secretary determines that:
 - (a) it is not reasonable or feasible to remediate the impact or environmental consequence; or
 - (b) remediation measures implemented by the Applicant have failed to satisfactorily remediate the impact or environmental consequence;
 then the Applicant must provide a suitable offset to compensate for the impact or environmental consequence, to the satisfaction of the Secretary.

Note: Any offset required under this condition must be proportionate with the significance of the impact or environmental consequence.

Performance Measures – Built Features

3. The Applicant must ensure that the development does not cause any exceedances of the performance measures in Table 2, to the satisfaction of the Secretary.

Table 2: Subsidence Impact Performance Measures – Built Features

Key public infrastructure and features:	Performance Measure
Sandy Hollow to Gulgong Railway Line	• Always safe and serviceable. • Damage that does not affect safety or serviceability must be fully repairable, and must be fully repaired.
Bylong Valley Way	
Other built infrastructure	
Electricity Transmission Lines and associated infrastructure	• Serviceability should be maintained wherever practicable. • Loss of serviceability must be fully compensated. • Damage must be fully repairable, and must be fully repaired or else replaced or fully compensated. • Damage must be fully repairable, and must be fully repaired or else replaced or fully compensated.
Telecommunications Lines	
Other non-mine owned built features and improvements, including fences, farm dams, access roads	
Bylong Quarry	
Bylong State Forest – commercial timber production	
Public Safety	
Public safety	• Negligible additional risk

Notes:

- The Applicant will be required to define more detailed performance indicators for each of these performance measures in Built Features Management Plan, Property Subsidence Management Plans and Public Safety Management Plan (see condition 6 of this Schedule below).
- Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Secretary will be the final arbiter.
- Requirements regarding safety or serviceability do not prevent preventative or mitigatory actions being taken prior to or during mining in order to achieve or maintain these outcomes.

4. Any dispute between the Applicant and the owner of any built feature over the interpretation, application or implementation of the performance measures in Table 2 is to be settled by the Secretary. Any decision by the Secretary must be final and not subject to further dispute resolution under this consent.

First Workings

5. The Applicant may carry out first workings within the underground mining area, other than in accordance with an approved Extraction Plan, provided that the Secretary is satisfied that the first workings are designed to remain stable and non-subsiding in the long-term, except insofar as they may be impacted by approved second workings.

Note: The intent of this condition is not to require an additional approval for first workings, but to ensure that first workings are built to geotechnical and engineering standards sufficient to ensure long term stability, with negligible resulting direct subsidence impacts.

Extraction Plan

6. Prior to carrying out second workings, the Applicant must prepare an Extraction Plan for the relevant workings to the satisfaction of the Secretary. Each Extraction Plan must:

- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
- (b) include detailed plans of existing and proposed first and second workings and overlying surface features, including the identification of appropriate setback distances between cliffs, steep slopes and second workings and any applicable adaptive management measures;
- (c) provide revised predictions of the potential subsidence effects, subsidence impacts and environmental consequences of the proposed mining covered by the Extraction Plan, incorporating any relevant information obtained since this consent
- (d) describe in detail the performance indicators and measures that would be implemented to ensure compliance with the performance measures in Tables 1 and 2; and manage or remediate any impacts and/or environmental consequences to meet the rehabilitation objectives in condition 63 of Schedule 4.
- (e) include a
 - (i) *Subsidence Monitoring Program* which has been prepared in consultation with OEH and Forests NSW, to:
 - monitor the subsidence effects and subsidence impacts of the development;
 - develop effective remote monitoring techniques for the development;
 - provide data to assist with the management of risks associated with subsidence;
 - validate the subsidence predictions;
 - analyse the relationship between the predicted and resulting subsidence effects and predicted and resulting impacts under the plan and any ensuing environmental consequences; and
 - inform the contingency plan and adaptive management process;
 - (ii) *Built Features Management Plan* to manage the potential subsidence impacts of the proposed underground workings on built features, and which:
 - has been prepared in consultation with the owner/s of potentially affected feature/s;
 - addresses in appropriate detail all items of key public infrastructure and other public infrastructure and all classes of other built features;
 - recommends appropriate pre-mining mitigation measures to reduce subsidence impacts; and
 - recommends appropriate remedial measures and includes commitments to mitigate, repair, replace or compensate predicted impacts on potentially affected built features in a timely manner;
 - (iii) *Bylong Valley Way Management Plan* which has been prepared in consultation with Council and the Subsidence Advisory, to manage the potential subsidence impacts of the proposed underground workings on Bylong Valley Way, and which includes provisions for:
 - pre-mining mitigation measures to reduce subsidence impacts;
 - pre-mining inspections of the road condition;
 - review of subsidence movements prior to mining near the road to validate subsidence predictions;
 - notifications to the public and emergency services of the timing and location of mining operations beneath the road;
 - 24-hour monitoring of the road during critical periods of active subsidence, with repair crews on hand to repair and maintain the integrity of the road;
 - undertaking of temporary repairs of surface cracks as soon as possible; and
 - post-mining inspections to review the temporary repair work and determine the extent of permanent repairs required;
 - (iv) *Water Management Plan* which has been prepared in consultation with OEH and DPI Water, which provides for the management of potential impacts and/or environmental consequences of the proposed underground workings on watercourses and aquifers, including:
 - detailed baseline data on:
 - surface water flows and quality in Dry Creek, Bylong River, Lee Creek and the Growee River;
 - groundwater levels, yield and quality in the region;
 - surface and groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse impacts on water resources or water quality;
 - a surface water monitoring program to monitor and report on:
 - stream flows and quality;
 - stream and riparian vegetation health;
 - channel and bank stability;
 - a groundwater monitoring program to monitor and report on:
 - groundwater dependent ecosystems (including stygofauna);
 - groundwater inflows to the underground mining operations;
 - the height of groundwater depressurisation;
 - background changes in groundwater yield/quality against mine-induced changes, in particular, on non-mined owned groundwater bore users;

- permeability, hydraulic gradient, flow direction and connectivity of the deep and shallow groundwater aquifers;
 - a description of the remedial measures that would be undertaken to mitigate, repair or compensate identified impacts on water resources;
 - a description of any adaptive management practices to be implemented to guide future mining activities in the event of greater than predicted impacts on aquatic habitat;
 - a program to validate the surface water and groundwater models for the development, and compare monitoring results with modelled predictions; and
 - a plan to respond to any exceedances of the surface water and groundwater assessment criteria.
- (v) *Biodiversity Management Plan* which has been prepared in consultation with DoEE and OEHL, which provides for the management and monitoring of potential impacts and/or environmental consequences of the proposed first and second workings on aquatic and terrestrial flora and fauna, with a specific focus on:
- threatened species populations and their habitats, endangered ecological communities and groundwater dependent ecosystems including, but not limited to:
 - o Box Gum Woodland;
 - o Regent Honeyeater;
 - o Brush-tailed Rock-wallaby;
 - o Large-eared Pied Bat;
 - o Eastern Bentwing-bat; and
 - o Eastern Cave Bat
 - a cave-dwelling bat monitoring program associated with cliffs within and surrounding the subsidence area;
- (vi) *Land Management Plan* which has been prepared in consultation with OEHL, Forests NSW and any affected public authorities, to manage the potential impacts and/or environmental consequences of the proposed underground workings on land in general, with a specific focus on cliffs and steep slopes;
- (vii) *Heritage Management Plan(s)* which has been prepared in consultation with OEHL and RAPs, to manage the potential environmental consequences of the proposed workings on Aboriginal and historic heritage and includes all requirements under conditions 44 and 46 of Schedule 4;
- (viii) *Public Safety Management Plan* prepared in consultation with Forest NSW to ensure public safety and manage access on the site;
- (ix) *Property Subsidence Management Plan* for the Bylong State Forest and each privately-owned property affected by the proposed second workings, prepared in consultation with the landowner, which includes:
- a detailed structural inspection of residences, commercial premises and all other structures on the property;
 - a detailed subsidence impact assessment for the property, including (where relevant):
 - impacts on farm structures for the property ;
 - productivity impacts to commercial operations (such as the Bylong Quarry, Bylong State Forest and agricultural activities);
 - slope stability assessments;
 - soil erosion assessment, which recommends measures to avoid, mitigate and otherwise respond to increased soil erosion impacts; and
 - appropriate measures, commitments and timeframes to mitigate, repair, replace or otherwise compensate the impacts to the property;
 - measures to maintain access to Bylong State Forest including assistance in establishing a formal right of way;
- (x) include Trigger Action Response Plans, or equivalent, to prevent greater than predicted subsidence impacts and environmental consequences that may result from mining subsidence;
- (xi) include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measure in Tables 1 and 2, or where any such exceedance appears likely;
- (xii) proposes appropriate revisions to the Rehabilitation Management Plan required under condition 65 of Schedule 4; and
- (xiii) includes a program to collect sufficient baseline data for future Extraction Plans.

Note:

- *In accordance with condition 6 in Schedule 6, the preparation and implementation of Extraction Plans may be staged, with each plan covering a defined area of underground workings. In addition, these plans are only required to contain management plans that are relevant to the specific underground workings that are being carried out.*

7. The Applicant must implement the approved Extraction Plan for the development.

PAYMENT OF REASONABLE COSTS

8. The Applicant must pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent experts to review the adequacy of any aspect of an Extraction Plan.
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DRAFT

SCHEDULE 4 ENVIRONMENTAL PERFORMANCE CONDITIONS - GENERAL

ACQUISITION UPON REQUEST

1. Upon receiving a written request for acquisition from an owner of the land listed in Table 3, the Applicant must acquire the land in accordance with the procedures in conditions 5 and 6 of schedule 5.

Table 3: Land subject to acquisition upon request

Acquisition Basis	Land
Noise	60

Note: To interpret the land referred to in Table 3, see the applicable figures in Appendix 3.

2. The acquisition rights for the land identified in Table 3 cease once underground only mining operations commence.

MITIGATION UPON REQUEST

3. Upon receiving a written request from the owner of any residence on the land listed in Table 3 or Table 4, the Applicant must implement additional noise and/or air quality mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the *Voluntary Land Acquisition and Mitigation Policy*. They must also be reasonable and feasible and proportionate with the level of predicted impact.

If within 3 months of receiving this request from the owner, the Applicant 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.

Table 4: Land subject to additional mitigation upon request

Mitigation Basis	Land
Noise	44, 58, 65, 141, 151, 158

Notes:

- To interpret the land referred to in Table 4, see the applicable figures in Appendix 3.
- Receiver 44 is predicted to be affected by traffic noise only.

NOISE

Noise Criteria – During Open Cut Mining and Combined Open Cut/ Underground Mining

4. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Tables 5 at any residence on privately-owned land, during open cut and combined open cut and underground mining operations.

Table 5: Noise Criteria dB(A) – During open cut mining or combined open cut/ underground mining operations

Land	Day (L _{Aeq} (15 minute))	Evening (L _{Aeq} (15 minute))	Night (L _{Aeq} (15 minute))	Night (L _{A1} (1 minute))
65	39	40	40	45
141	38	40	40	45
151	35	39	39	45
158	35	38	38	45
58	37	38	38	45
56	35	37	37	45
57A, 57C	35	36	36	45
All other privately owned land	35	35	35	45

Notes:

- To interpret the land referred to in Table 5, see the applicable figures in Appendix 3.

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated from time-to-time). Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

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

Noise Criteria – During Underground Mining

5. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 6 at any residence on privately-owned land, during underground mining operations (only).

Table 6: Noise Criteria dB(A) – During underground mining only operations

Land	Day (L_{Aeq} (15 minute))	Evening (L_{Aeq} (15 minute))	Night (L_{Aeq} (15 minute))	Night (L_{A1} (1 minute))
60, 65	35	36	36	45
All other privately owned land	35	35	35	45

Notes:

- To interpret the land referred to in Table 6, see the applicable figures in Appendix 3.
- For the avoidance of doubt, these criteria do not apply until open cut mining operations (including decommissioning) have been completed.

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated from time-to-time). Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

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

Operating Conditions

6. The Applicant must:
 - (a) implement all reasonable and feasible measures to minimise the construction, operational, low frequency road and rail noise of the development;
 - (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 consent;
 - (c) minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 5);
 - (d) restrict Upper Bylong Road upgrade works to the day time period when construction works are within 500 metres of Bylong Village, unless required for emergency or safety purposes and approved by the Secretary;
 - (e) ensure that all fixed and mobile plant are fitted with noise attenuation units;
 - (f) only use locomotives and rolling stock that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL; and
 - (g) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent and, if necessary, adjust the scale of operations on site to meet the criteria in this consent.

Noise Management Plan

7. Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA and the CCC;
 - (b) describe the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions of this consent;
 - (c) describe the proposed noise management system in detail;
 - (d) include a monitoring program that:
 - evaluates and reports on:
 - o the effectiveness of the noise management system;
 - o compliance against the noise criteria in this consent; and
 - o 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 trigger for further attended monitoring where there is a risk of non-compliance with the noise criteria in this consent); and
 - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

8. The Applicant must implement the approved Noise Management Plan for the development.

BLASTING

Blasting Criteria

9. The Applicant must ensure that the blasting on the site does not cause exceedances of the criteria in Table 7.

Table 7: Blasting criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land ^a	120	10	0%
	115	5	5% of the total number of blasts over a rolling period of 12 months
All public infrastructure	-	50 (or a limit determined by the structural design methodology in AS 2187.2 - 2006, or its latest version, or other alternative limit for public infrastructure, to the satisfaction of the Secretary)	0%
Heritage items ^b	133	15	0%
Rock shelters and cultural features ^c	133	50	0%

a. Unless otherwise agreed with the relevant owner/s of the residence, and the Applicant has advised the Department in writing of the terms of this agreement

b. Unless measures to minimise and rectify any blast-related damage to these features have been approved as part of a specific blast management plan for the feature (see condition 16 of this Schedule). Applies to all heritage items outside the disturbance area, as listed in Appendix 6.

c. Unless measures to minimise any blast-related damage to these features have been approved as part of a specific blast management plan for the feature (see condition 16 of this Schedule). Applies to all rock shelters and significant sandstone features outside the disturbance area, as listed in Appendix 6.

Blasting Hours

10. The Applicant must only carry out blasting on site between 9am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.

This condition does not apply to blasts required to ensure the safety of the mine, its workers or the general public.

Blasting Frequency

11. The Applicant may carry out a maximum of:

(a) 2 blasts a day; and

(b) 6 blasts a week,

at 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, blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.

Notes:

- 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.
- For the avoidance of doubt, should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast.
- In circumstances of recurring unfavourable weather conditions (following planned but not completed blast events), to avoid excess explosive sleep times and minimise any potential environmental impacts, the Applicant may seek agreement from the Secretary for additional blasts to be fired on a given day.

Property Inspections

12. If the Applicant receives a written request from the owner of any privately-owned land within 3 kilometres of the approved open cut mining pit/s 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 Applicant must:
- 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 development on these buildings and/or structures; and
 - 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 Applicant 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

13. If any owner of privately-owned land within 3 kilometres of any approved open cut mining pit/s on site, or any other landowner where the Secretary is satisfied an investigation is warranted, claims in writing 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 written claim the Applicant 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 Applicant 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 Applicant 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

14. During blasting operations on site, the Applicant must:
- (a) implement reasonable and feasible measures to:
 - protect the safety of people and livestock in the area surrounding blasting operations;
 - protect public or private infrastructure/property, heritage items, rock shelters and cultural features in the area surrounding blasting operations; and
 - minimise the dust and fume emissions from blasting at the site;
 - (b) minimise the frequency and duration of any public road closures required for blasting activities; and
 - (c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site; and
 - (d) carry out regular blast monitoring to determine whether the development is complying with the relevant conditions of this consent.
15. The Applicant must not undertake blasting on site within 500 metres of any public road or railway, or any land outside the site not owned by the Applicant, unless the Applicant has:
- (a) 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 Applicant has advised the Department in writing of the terms of this agreement; or
 - (b) 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 buildings and/or structures; and 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.

Blast Management Plan

16. Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the EPA, OEH and the CCC;
 - (b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;
 - (c) propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site (if relevant);

- (d) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with Council;
- (e) include a blast fume management protocol and a risk based blasting permissions protocol; and
- (f) include a monitoring program for evaluating and reporting on compliance with the blasting criteria and operating conditions of this consent; and
- (g) include site specific blast management plan/s for any;
 - heritage item that is proposed to be affected by blasting above the criteria in Table 7, with the plan to include measures to minimise and rectify any blast-related damage to the item;
 - rock shelter or cultural feature that is proposed to be affected by blasting above the criteria in Table 7, with the plan to include measures to minimise any blast-related damage to the item.

17. The Applicant must implement the approved Blast Management Plan for the development.

AIR QUALITY

Odour

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

Air Quality Criteria

19. The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Table 8 at any residence on privately owned land.

Table 8: Air quality criteria

Pollutant	Averaging period	^d Criterion	
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	
	24 hour	^a 50 µg/m ³	
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³	
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes:

^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..

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

Mine-owned Land

20. The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Table 8 at any occupied residence on mine-owned land (including land owned by another mining company), unless:
- (a) the tenant and landowner (if the residence is owned by another mining or gas company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under Schedule 5 of this consent;
 - (b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice and cause;
 - (c) air mitigation measures such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant or landowner (if the residence is owned by another mining company);
 - (d) air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining or gas company) of the particulate emissions at the residence; and
 - (e) data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.

Operating Conditions

21. The Applicant must:
- (a) implement all reasonable and feasible measures to minimise the off-site odour, fume, diesel particulate, spontaneous combustion and dust emissions of the development;
 - (b) implement reasonable and feasible measures to minimise dust emissions from railed coal product, including a water spray or dust suppressant system at the train load-out facility;
 - (c) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site;
 - (d) minimise any visible air pollution generated by the development;
 - (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 consent;
 - (f) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d to Table 8); and
 - (g) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent.

Air Quality Management Plan

22. Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the EPA and the CCC;
 - (b) describe the measures which would be implemented to ensure compliance with the air quality criteria and operating conditions of this consent, including the preparation of an annual energy efficiency program;
 - (c) describe the air quality management system in detail;
 - (d) include a protocol for notifying NSW Health and any affected residents of any exceedance of the air quality criteria;
 - (e) include an air quality monitoring program that:
 - uses monitors to evaluate the performance of the development against the air quality criteria in the consent;
 - adequately supports the air quality management system;
 - evaluates and reports on:
 - o the effectiveness of the air quality management system; and
 - o compliance with the air quality criteria and operating conditions; and
 - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents; and
 - (f) include a Spontaneous Combustion Management Plan that:
 - identifies all areas (including stockpiles, waste emplacements, piles, seams, goafs and inter-burden) at risk of spontaneous combustion events;
 - includes a protocol for ongoing monitoring and management of areas at risk of spontaneous combustion events; and
 - includes a protocol for the management of on-site heating and spontaneous combustion events.

Note: The air quality monitoring program may incorporate monitoring from any relevant regional monitoring network endorsed by EPA.

23. The Applicant must implement the approved Air Quality Management Plan for the development.

METEOROLOGICAL MONITORING

24. Prior to commencement of development under this consent and for the life of the development, the Applicant must ensure that there is a 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 inversions in accordance with the *NSW Industrial Noise Policy*, unless a suitable alternative is approved by the Secretary following consultation with the EPA.

WATER

Water Supply

25. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply.

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

26. Prior to the commencement of open cut mining operations and underground mining operations, unless otherwise agreed by the Secretary, the Applicant must demonstrate that it has adequate water access licences to account for the maximum predicted volume of water to be used by the development for those mining operations (and any existing mining areas), to the satisfaction of the Secretary.

Note: The predicted water demand shall be based on updated groundwater and water balance modelling that refines the groundwater inflows and other water use, based on monitoring data.

Compensatory Water Supply

27. The Applicant must provide a compensatory water supply to the owner of any privately-owned land whose surface water and/or groundwater supply is adversely and directly impacted (other than a negligible impact) as a result of the development, in consultation with DPI Water, and to the satisfaction of the Secretary.

The compensatory water supply measures must provide an alternative supply of water that is equivalent, in quality and volume, to the loss attributed to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable from the loss being identified, unless otherwise agreed with the landowner.

If the Applicant 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.

If the Applicant is unable to provide an alternative long-term supply of water, then the Applicant must provide alternative compensation to the satisfaction of the Secretary.

Note: The Water Management Plan (see condition 30) is required to include trigger levels for investigating potentially adverse impacts on water supplies.

Water Pollution

28. The Applicant must not discharge any water from the site or irrigate any waste water on site except as may be expressly provided by an EPL, or in accordance with Section 120 of the POEO Act.

Water Management Performance Measures

29. The Applicant must comply with the performance measures in Table 9 to the satisfaction of the Secretary.

Table 9: Water management performance measures

Feature	Performance Measure
General	Maintain separation between clean, dirty and mine water management systems Minimise the use of clean water on site Design, install, operate and maintain water management systems in a proper and efficient manner
Alluvial Aquifers	Negligible environmental consequences to the alluvial aquifer beyond those predicted in the EIS, including: - negligible change in groundwater levels beyond those predicted; - negligible change in groundwater quality beyond those predicted; and - negligible impact to other groundwater users beyond those predicted
Bylong River, Lee Creek, Dry Creek and Growee River	Negligible environmental consequences to surface water resources beyond those predicted in the EIS, including: - negligible change in surface water flows beyond those predicted; - negligible change in surface water quality beyond those predicted; and - negligible impact to other surface water users beyond those predicted Maintain or improve baseline channel stability
Clean water diversion & storage infrastructure	Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site
Sediment dams	Design, install and/or maintain sediment dams to ensure no discharges to surface waters, except in accordance with an EPL or in accordance with Section 120 of the POEO Act
Mine water storages	Design, install and/or maintain mine water storage infrastructure to ensure no discharge of untreated mine water off-site

Feature	Performance Measure
Flood mitigation measures	Design, install and maintain flood levees, as required, to exclude flood flows into the open cut mining areas and mine infrastructure areas for all flood events up to and including the 1 in 1,000 year ARI flood.
Overburden, CHPP reject materials	Design, install and maintain emplacements to prevent or minimise the migration of pollutants due to seepage
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards

Water Management Plan

30. Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with the EPA, DPI Water and the CCC and by suitably qualified and experienced person/s whose appointment has been approved by the Secretary;
 - include detailed performance criteria and describe measures to ensure that the Applicant complies with the water management performance measures (see Table 9);
 - in addition to the standard requirements for management plans (see condition 3 of schedule 6), include a:
 - Site Water Balance that:
 - includes details of:
 - sources and security of water supply, including contingency planning for future reporting periods;
 - water use and management on site, including details of water sharing between neighbouring mining operations (if applicable);
 - any off-site water transfers and discharges;
 - reporting procedures, including the preparation of a site water balance for each calendar year; and
 - investigates and implements all reasonable and feasible measures to minimise water use on site;
 - Salt Balance that:
 - includes details of:
 - sources of saline material on the site;
 - saline material and saline water management on site;
 - reporting procedures, including the preparation of a salt balance for each calendar year; and
 - investigates and implements all reasonable and feasible measures to minimise short term and long term discharge of saline water from the site;
 - Surface Water Management Plan, that includes:
 - detailed baseline data on surface water flows and quality in the watercourses that could potentially be affected by the development;
 - a program to augment the baseline data over the life of the development;
 - a detailed description of the water management system on site, including the:
 - clean water diversion systems;
 - sediment dams and associated infrastructure;
 - mine water management system;
 - flood management;
 - reject emplacement and mine water storage within the eastern open cut final void;
 - detailed objectives and performance criteria, including trigger levels for investigating any potentially adverse impacts associated with the development for:
 - downstream surface water quality;
 - stream and riparian health in the Growee River, Bylong River to the confluence of the Goulburn River, Lee Creek and Dry Creek;
 - channel stability;
 - design and management for the emplacement of coal reject material and saline, sodic and PAF materials;
 - reinstatement of drainage lines on the rehabilitated areas of the site; and
 - control of any potential water pollution from the rehabilitated areas of the site;
 - a program to monitor and report on:
 - the effectiveness of the mine water management system; and
 - surface water flows and quality, channel stability, stream and riparian vegetation health of the Growee River, Bylong River, Lee Creek and Dry Creek;
 - the performance measures listed in Table 9;
 - impacts on water users;
 - reporting procedures for the results of the monitoring program; and
 - a plan to respond to any exceedances of the trigger levels and/or performance criteria, and mitigate and/or offset any adverse surface water impacts of the development;

including measures to provide compensatory water supply to any affected downstream water user under condition 27 of this schedule.

(iv) **Groundwater Management Plan** that includes:

- detailed baseline data on groundwater levels, yield and quality in the region that could be affected by the development, including privately-owned groundwater bores and groundwater dependent ecosystems;
- groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;
- a program to monitor and report on:
 - o groundwater inflows to the open cut pits and underground workings, including allocating inflows to relevant water sources;
 - o the seepage/leachate from water storages, emplacements, backfilled voids, and final voids;
 - o the impacts of the development on:
 - regional and local (including alluvial) aquifers;
 - groundwater supply of potentially affected landowners;
 - groundwater dependent ecosystems, stygofauna and riparian vegetation; and
 - base flow to surface water sources;
- a borefield management plan, that includes a detailed description of the borefield and measures to minimise the impact of the borefield on alluvial aquifers, groundwater users and the environment;
- a program to validate and peer review the groundwater model for the development every 3 years and compare monitoring results with modelled predictions; and
- a plan to respond to any exceedances of the trigger levels and/or performance criteria, and mitigate and/or offset any adverse groundwater impacts of the development, including measures to provide compensatory water supply to any affected groundwater users under condition 27 of this schedule.

31. The Applicant must implement the approved Water Management Plan for the development.

BIODIVERSITY

Land-Based Offsets

32. Within 2 years of the date of commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must secure the offset areas listed in Table 10 (or alternative offset areas with comparable ecological values as agreed in consultation with OEH and to the satisfaction of the Secretary) by entering into a Biobanking Agreement(s), in accordance with the relevant provisions of the TSC Act.

Table 10: Land-based Offsets

Offset Area	Minimum Size (hectares)
Offset Area 1	687 hectares of native vegetation
Offset Area 2	420 hectares of native vegetation
Offset Area 3	455 hectares of native vegetation
Offset Area 4	311 hectares of native vegetation
Yarran View Offset Area	418 hectares of native vegetation
Fuzzy Box Offset Area	17 hectares of native vegetation

Notes:

1. To identify the areas referred to in Table 10 see the applicable figures in Appendix 4.
2. By entering a Biobanking Agreement, the Applicant will be required to develop a management plan for each of these offset areas and provide in perpetuity up-front funding to implement agreed management measures. Therefore management of these offset areas do not need to be incorporated into the Biodiversity Management Plan required under condition 38 or conservation bonds required under condition 40 of this Schedule.

Retirement of Credits

33. Within 2 years of the date of commencement of development under this consent, the Applicant must retire biodiversity credits of a number and class specified in Tables 11 and 12 below to the satisfaction of OEH.

The retirement of these credits must be carried out in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* and can be achieved by:

- (a) acquiring or retiring credits under the Biobanking Scheme in the TSC Act;

- (b) making payments into an offset fund that has been developed by the NSW Government; or
(c) providing supplementary measures.

Table 11: Ecosystem Credit Requirements

Vegetation Community	Code (PCT)	Endangered Ecological Community (EEC)	Credits required
Yellow Box grassy woodland on lower hillslopes and valley flats in the southern NSW Brigalow Belt South Bioregion	HU732	Conforming to Box Gum Woodland under the TSC and EPBC Acts	590
Yellow Box grassy woodland on lower hillslopes and valley flats in the southern NSW Brigalow Belt South Bioregion	HU732	-	3
Grey Box – White Box grassy open woodland on basalt hills in the Merriwa region, upper Hunter Valley	HU690	Conforming to Box Gum Woodland under the TSC and EPBC Acts	4,669
Grey Box – White Box grassy open woodland on basalt hills in the Merriwa region, upper Hunter Valley	HU690	-	5,035 ¹
Rough-barked Apple-Red Gum-Yellow Box woodland on alluvial clay to loam soils on valley flats in northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion	HU714	-	295
Fuzzy Box Woodland on alluvial brown loam soils mainly in NSW South Western Slopes Bioregion	HU547	-	152
White Box-Black Cypress Pine shrubby woodland of the Western Slopes	HU824	-	6,431
Grey Box-Slaty Box shrub-grass woodland on sandstone slopes of the upper Hunter and Sydney Basin	HU869	Conforming to Hunter Valley Footslopes Slaty Gum Woodland listed under the TSC Act	1,480

Table 12: Species Credit Requirements

Species	Credits Required
Regent Honeyeater	8,786 ²
Brush-tailed Rock-wallaby	688
Large-eared Pied Bat	728
Eastern Bentwing-bat	728
Eastern Cave Bat	728

Notes for Tables 11 and 12

- Additional ecosystem credits are required for non-listed "Grey Box – White Box grassy open woodland on basalt hills in the Merriwa region, Upper Hunter Valley" from Offset Area 5, see condition 37 of this Schedule below. The total ecosystem credit liability for this community is 6,474 credits.
- Additional species credits are required for the Regent Honeyeater from Offset Area 5, see condition 37 of this Schedule below. The total species credit liability for the Regent Honeyeater is 15,507 credits.
- If there is a surplus in credits following this validation then these remaining credits will be held by the Applicant for future use.

34. The Applicant may use the ecosystem and species credits generated by the establishment of Biobanking Agreements for the offset areas in Table 10 to retire biodiversity credit requirements of the development under conditions 33 of this Schedule.

Notes:

- The Applicant will be required to undertake additional survey work in the offset areas to the satisfaction of OEH to validate the number of ecosystem and species credits that can be retired.
- If there is a shortfall in credits following this validation, then additional credits will need to be retired in accordance with condition 33.

Land Based Offset – Offset Area 5

35. Within 2 years of the date of commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must make suitable arrangements to provide appropriate long-term

security for the offset area listed in Table 13, in consultation with OEH and to the satisfaction of the Secretary.

Table 13: Land-based Offset – Offset Area 5

Offset Area	Minimum Size (hectares)
Offset Area 5	1,497 hectares of native vegetation

Note: This is to provide appropriate security arrangements until Offset Area 5 is secured in perpetuity through a Biobanking Agreement in accordance with condition 36 of this Schedule.

Retirement of Credits – Offset Area 5

36. Within two years of commencing development under this consent, unless otherwise agreed by the Secretary, the Applicant must validate through additional survey work the number of ecosystem and species credits in Offset Area 5.

Note: This is required to confirm the base-line credits within this area prior to longwall mining commencing.

37. Within 2 years following completion of underground mining below Offset Area 5, unless the Secretary agrees otherwise, the Applicant must retire biodiversity credits of a number and class specified in Tables 14 and 15 below to the satisfaction of OEH.

The retirement of these credits must be carried out in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* and can be achieved by:

- acquiring or retiring credits under the Biobanking Scheme in the TSC Act;
- making payments into an offset fund that has been developed by the NSW Government; or
- providing supplementary measures.

Table 14: Ecosystem Credit Requirements

Vegetation Community	Code (PCT)	Endangered Ecological Community (EEC)	Credits required
Grey Box – White Box grassy open woodland on basalt hills in the Merriwa region, upper Hunter Valley	HU690	-	1,439

Table 15: Species Credit Requirements

Species	Credits Required
Regent Honeyeater	5,106

Note:

- To identify Offset Area 5 see the applicable figures in Appendix 4.
- If there is a surplus in credits following this validation then these remaining credits will be held by the Applicant for future use.

Biodiversity Management Plan

38. Prior to carrying out any development under this consent, unless otherwise agreed by the Secretary, the Applicant must prepare a Biodiversity Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH and DoEE;
 - describe the short, medium, and long term measures that would be implemented to manage the remnant vegetation and fauna habitat on the site and in Offset Area 5 ;
 - include detailed performance and completion criteria for evaluating the performance of Offset Area 5, and triggering remedial action (if necessary);
 - include biometric surveys of native vegetation within Offset Area 5 to assess change in biodiversity values, using a suitable biometric methodology agreed by OEH and targets the:
 - reduction in biodiversity values as a result of subsidence; and
 - increase in biodiversity values due to implementation of offset management measures
 - include a detailed description of the measures that would be implemented to:
 - minimise the impacts on fauna on site, including undertaking pre-clearance surveys;
 - maximise the salvage of resources within the approved disturbance area - including vegetative and soil resources – for beneficial reuse in the enhancement of any land-based offsets or the rehabilitation of the site;
 - collect and propagate seed to be used for site rehabilitation;
 - protect vegetation and fauna habitat outside the approved disturbance area on-site;
 - enhance the quality of existing vegetation and fauna habitat in Offset Area 5;

- manage any conflicts between the proposed enhancement works in Offset Area 5 and any Aboriginal cultural heritage values (both cultural and archaeological);
 - minimise clearing and avoid unnecessary disturbance;
 - manage salinity;
 - avoid and mitigate the spread of *Phytophthora cinnamomi* (*P. cinnamomi*) with consideration of actions identified in relevant threat abatement plans;
 - control weeds and feral pests;
 - control erosion;
 - manage grazing and agriculture on site;
 - control access; and
 - manage bushfire risk;
- (f) include a program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria; and
- (g) include details of who would be responsible for monitoring, reviewing and implementing the plan.

39. The Applicant must implement the approved Biodiversity Management Plan for the development.

Conservation Bond – Offset Area 5

40. Within two years of commencing development under this consent, unless otherwise agreed by the Secretary, the Applicant must lodge a Conservation Bond with the Department to ensure that the management of Offset Area 5 is implemented in accordance with the performance and completion criteria in the Biodiversity Management Plan. The sum of the bond shall be determined by:
- (a) calculating the full cost of implementing the management actions for Offset Area 5 (other than land acquisition costs); and
 - (b) employing a suitably qualified and experienced person to verify the calculated costs, to the satisfaction of the Secretary.

If the management of Offset Area 5 is completed in accordance with the completion criteria in the Biodiversity Management Plan the Secretary will release the bond.

If the management of Offset Area 5 is not completed in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the completion of the relevant works.

Notes:

1. *An example of a suitably qualified and experienced person would include an accredited Biobanking assessor, with demonstrated experience in developing land management costings for biodiversity conservation management measures.*
2. *Alternative funding arrangements for long-term management of Offset Area 5 such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to National Park Estate can be used to reduce the liability of the conservation and biodiversity bond.*
3. *The sum of the bond may be reviewed in conjunction with any revision to the Biodiversity Management Plan.*

HERITAGE

Protection of Aboriginal Heritage Items

41. The Applicant must protect the Aboriginal heritage items located outside of the Disturbance Area, Subsidence Area and blast impact areas as identified in Appendix 6.

Salvage, Excavation and Archival Recording

42. Prior to carrying out any development on site that could directly or indirectly impact the heritage items identified in Appendix 6, the Applicant must undertake archival recording and/or salvage and/or test excavation of those items in accordance with the approved program under the Aboriginal Heritage Management Plan (see condition 44 of this Schedule) or Historic Heritage Management Plan (see condition 46 of this Schedule).

Cultural Heritage Survey – Offset Areas

43. Within 24 months of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant shall carry out an investigation into the Aboriginal cultural heritage values in Offset Areas 1 to 4, the Yarran View Offset Area and the Fuzzy Box Offset Area to the satisfaction of the Secretary. This investigation must:
- (a) be undertaken by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
 - (b) be undertaken in consultation with OEH and RAPs;
 - (c) include a detailed report on the findings; and
 - (d) describe how the outcomes would be incorporated into the Biodiversity Management Plan, Aboriginal Cultural Heritage Plan and Biobanking Agreements required under this consent.

Aboriginal Heritage Management Plan

44. Prior to carrying out any development under this consent, unless otherwise agreed by the Secretary, the Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
 - (b) be prepared in consultation with OEH and RAPs;
 - (c) include a description of the measures that would be implemented for managing Aboriginal sites in a manner that is generally consistent with that identified in Appendix 6 and the EIS, including:
 - for sites subject to direct impacts within the disturbance area:
 - o collection and salvage of sites, including artefact scatters, isolated fines and modified trees;
 - o test excavation and salvage excavation of significant sites, including the PAD sites (including PAD 1 and AS077); and
 - o archival recording of cultural features within the disturbance area (including CUL010 and CUL011);
 - for sites subject to indirect impacts within the subsidence area and blast affectation area:
 - o archival recordings of all sites and cultural features, as well as the high significance grinding grooves that are not predicted to be affected (GG001 to GG003);
 - o test excavation of rock shelter site RS013;
 - o protection of rock shelter sites and cultural features of high significance from the affects of subsidence and blasting, where reasonable and feasible;
 - o monitoring and inspection during and after mining;
 - (d) include a description of the measures that would be implemented for:
 - protection, monitoring and management of sites outside the disturbance area, Subsidence Area and blast affectation area;
 - investigation and research into the ochre site (OQ001) and rock art in the Bylong area, including:
 - o chemical analysis of the ochre source and its availability in the region;
 - o examination of rock art sites; and
 - o research on cultural rock art in the Bylong area (including examining reasons for the predominant use of red ochre over other colours, and the prevalence of hand stencil motifs over other motifs);
 - assessment of the Aboriginal cultural heritage values of the biodiversity offset areas;
 - maintaining and managing reasonable access to cultural heritage sites for Aboriginal stakeholders;
 - managing the discovery of human remains or previously unidentified Aboriginal artefacts;
 - adequate training and induction of personnel;
 - ongoing consultation with the RAPs in the conservation and management of Aboriginal cultural heritage both on site and in the biodiversity offset areas; and
 - storage and management of salvaged items.
45. The Applicant must implement the approved Aboriginal Heritage Management Plan for the development.

Historic Heritage Management Plan

46. Prior to carrying out any development under this consent, unless otherwise agreed by the Secretary, the Applicant must prepare an Historic Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
 - (b) be prepared in consultation with the Heritage Branch, Council, and local historical organisations;
 - (c) include:
 - (i) a description of the measures that would be implemented for:
 - photographic and archival recording, test excavation and archaeological salvage of all historic heritage sites within the disturbance area;
 - relocation of moveable historic heritage sites within the disturbance area, where reasonable and feasible;
 - photographic and archival recording, dilapidation surveys, mitigation, monitoring and management/rectification for historic heritage sites within the blast affectation area, in accordance with the Blast Management Plan in condition 16 of this Schedule;
 - further archaeological investigation of the Renfrew Park 1 and 2 heritage sites, prior to any disturbance of these sites;
 - landscape treatments to mitigate visual impacts on historic heritage sites;
 - protection, monitoring and management of historic heritage sites outside the disturbance area;
 - managing the discovery of previously unidentified historic heritage sites; and

- storage and management of salvaged items;
- (ii) Conservation Management Plans for historic heritage sites owned by the Applicant outside the disturbance area, including provisions for assisting Council or other regulators with any proposal to list the sites on applicable heritage registers;
- (iii) a Burials Management Plan, prepared in consultation with NSW Health, for the exhumation and reinterment of human burial sites in accordance with applicable statutory instruments such as the *Public Health Regulation 2012*, including provision for installation of a memorial in the local area in the event that reburials occur outside the locality;
- (iv) a Horse Burial Management Plan for the exhumation and reinterment of horse burials; and
- (v) an Interpretation Plan for the broader Bylong Valley locality, including provision for a detailed oral history prepared in consultation with the Bylong Valley community.

47. The Applicant must implement the approved Historic Heritage Management Plan for the development.

TRANSPORT

Monitoring of Coal Transport

48. The Applicant must:
- (a) keep accurate records of the:
 - amount of coal transported from the development in each calendar year (on a monthly basis);
 - number of coal haulage train movements generated by the development (on a daily basis); and
 - (b) include these records in the Annual Review.

Shift changes and school bus routes

49. The Applicant must:
- (a) schedule production shift changes on site to occur outside of school bus hours; and
 - (b) co-ordinate the production shift changes on site with the production shift changes of the Moolarben, Wilpinjong and Ulan mines to minimise the potential cumulative traffic impacts

Sealing of Wollar Road

50. The Applicant must not commence construction until Wollar Road has been sealed along its entire length, unless otherwise agreed by the Secretary.

Roadworks – Upgrades and Safety Measures

51. The Applicant must provide funding towards or implement the road and safety upgrades as specified in Table 16. These measures must be carried out in accordance with the timing specified in the table, unless otherwise agreed by the Secretary.

Table 16: Road and Ancillary Infrastructure Upgrades

Measures	Timing	Funding	Roads Authority
Construction of the North Link Road ¹ Sealed and to be constructed to the satisfaction of Council and grade separated from mine haul roads.	Constructed prior to closure of the Upper Bylong Road	Component of the development	Council
Construction of the realigned Upper Bylong Road (east link) Unsealed with the pavement standard to the satisfaction of Council with the crossing of the Bylong River constructed to an equivalent flood design as the existing Upper Bylong Road crossing.	Constructed prior to closure of the Upper Bylong Road	Component of the development	Council

Measures	Timing	Funding	Roads Authority
Wollar Road (Munghorn Gap) upgrade.	Timing as approved under the Traffic Management Plan required under Condition 55 of this Schedule	Funding to Roads Authority for upgrades, (note - contribution being negotiated)	Council
Road Safety Upgrades – Bylong Valley Way east (within MSC area)	Funding provided prior to commencement of construction	\$40,000 funding to Roads Authority for road safety upgrades	MSC
Upper Bylong Road Upgrade – including intersection with Bylong Valley Way Sealed and to be upgraded to the satisfaction of Council	Timing as approved under the Traffic Management Plan required under Condition 55 of this Schedule.	Component of the development	Council
Workforce Accommodation Facility intersection (if the facility and/or car parking area is required under conditions 8 and 9 of Schedule 2) Constructed to the satisfaction of Council.	Prior to use of the facility.	Component of the development	Council
Pavement upgrade Bylong Valley Way between Wollar Road and Upper Bylong Road and intersection upgrade Bylong Valley Way-Wollar Road.	Timing as approved under the Traffic Management Plan required under Condition 55 of this Schedule.	Funding to Roads Authority for upgrades, (note - contribution being negotiated)	Council

Table notes:

1. The North Link Road does not have to be constructed if the Applicant has successfully acquired and/or negotiated an agreement with the owners of the three private landholdings along Lee Creek Road, to the satisfaction of the Secretary.

52. Prior to the closure of Upper Bylong Road, the Applicant must provide a formal right of way over the East Link Road to maintain access to landholdings and to Wollemi National Park.

Note: The East Link Road could also be transferred to Council as an unsealed two-lane public road following cessation of mining operations.

Heavy Vehicle Access Restrictions – Bylong Valley Way

53. The Applicant must ensure that no heavy vehicles related to the development, excluding light rigid heavy vehicles and medium rigid heavy vehicles up to a GVM of 10 tonnes, use:
 - Bylong Valley Way between the Golden Highway intersection and the entry into the Bylong Quarry; or
 - Bylong Valley Way between the Castlereagh Highway and Upper Bylong Road; or
 - Ulan-Wollar Road
 to access the site; except in any emergency to avoid loss of life, property and/or to prevent environmental harm or as otherwise agreed by the Secretary.

Note: Heavy vehicles related to the development can access Bylong Valley Way within the Subsidence Area for the purposes of road maintenance and implementing mitigation measures for subsidence impacts.

Road Maintenance Contributions

54. The Applicant must provide annual road maintenance contributions to the appropriate roads authority in accordance with Table 17 below.

Table 17: Road Maintenance Contributions

Roads Authority	Timing	Amount
Council	Annual payments with the first payment within 3 months of the date of commencement of development and then every 12 months until mining operations have ceased following approval of a closure plan for the mine. <i>Note: 50 percent of the annual payment must continue to be made if the mine were to be placed in care and maintenance.</i>	\$177,000 (plus GST) CPI indexed annually from the 2017/ 2018 financial year.

Traffic Management Plan

55. Prior to carrying out any development under this consent, unless otherwise agreed by the Secretary, the Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with the RMS, Council and MSC;
 - include:
 - detailed plans and implementation schedules for road closures, road re-alignments and road and safety upgrades specified in Table 16;
 - nominated heavy vehicle access routes for construction and operational stages, including details on volumes and nature of heavy, over size and/or over mass vehicles;
 - a code of conduct for drivers of heavy vehicles;
 - performance measures and criteria for transport and fatigue management of employees and contractors;
 - describe the measures that would be implemented to:
 - minimise the construction and operational traffic impacts of the development, including on school bus routes;
 - manage fatigue and improve road safety for the construction and operational workforce, including driver education training programmes;
 - maintain the pavement of the realigned Upper Bylong Road (East Link) and "right of way" for access to eastern landholdings; and
 - use buses and car-pooling to transport the construction and operational workforce to the site as far as reasonably practicable;
 - include a monitoring program for:
 - heavy vehicle traffic movements, including monitoring heavy vehicle access restrictions;
 - vehicle numbers and traffic routes against predictions in the EIS; and
 - utilisation rates of shuttle buses and car-pooling during construction and operations.
56. The Applicant must implement the approved Traffic Management Plan for the development.

VISUAL

Operating Conditions

57. The Applicant must:
- implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development;
 - establish and maintain roadside vegetative screens along the upgraded Upper Bylong Road, the realigned Upper Bylong Road (East Link) and North Link Road (if constructed) and ;
 - ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version; and
 - monitor and report on the effectiveness of these measures,

Initial works to establish the roadside vegetative screening referred to in sub-condition (b) must be undertaken prior to commissioning of the relocated Upper Bylong Road, in accordance with a tree screening plan that has been prepared in consultation with Council and to the satisfaction of the Secretary.

Additional Visual Mitigation Measures

58. Upon receiving a written request from the owner of any residence on privately-owned land who has, or would have, significant direct views of the mining operations from this residence and/or its associated facilities (such as pool or barbeque area) during the development, the Applicant must implement additional visual impact mitigation measures on the land in consultation with the landowner. These

measures must be reasonable and feasible, and directed towards reducing the visibility of mining operations from the residence and/or its associated facilities.

If within 3 months of receiving this request from the owner, the Applicant 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.

Notes:

- *The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from significantly affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties.*
- *The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (i.e. the additional measures could involve the implementation of measures outside the affected property boundary that provide an effective reduction in visual impacts).*
- *Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for existing residences that are more than 5 kilometres from the open cut mining operations and mine infrastructure areas.*

BUSHFIRE MANAGEMENT

59. The Applicant must:

- (a) ensure that the development is suitably equipped to respond to any fires on site; and
- (b) assist the RFS and emergency services as much as practicable if there is a fire in the vicinity of the site.

WASTE

60. The Applicant must:

- (a) implement all reasonable and feasible measures to minimise the waste (including coal rejects) generated by the development;
- (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of in accordance with the waste hierarchy;
- (c) manage on-site sewage treatment and disposal in accordance with the requirements of Council and EPA;
- (d) ensure irrigation of treated wastewater is undertaken in accordance with OEH's *Environmental Guideline for the Utilisation of Treated Effluent*; and
- (e) monitor and report on the effectiveness of the waste minimisation and management measures implemented on site in the Annual Review.

EXPLORATION ACTIVITIES & SURFACE INFRASTRUCTURE

Exploration Activities and Minor Surface Infrastructure Management Plan

61. Prior to carrying out exploration activities on site under this consent that would cause surface disturbance or the construction and/or upgrade of minor surface infrastructure, the Applicant must prepare an Exploration Activities and Minor Surface Infrastructure Management Plan for the development to the satisfaction of the Secretary. This Plan must:

- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
- (b) be prepared in consultation with OEH;
- (c) include a description of the measures that would be implemented for:
 - managing exploration activities on site;
 - managing construction and operation of minor surface infrastructure (including groundwater monitoring bores) and associated access tracks;
 - consulting with and addressing concerns of affected landowners;
 - avoiding threatened species, populations or their habitats and EECs;
 - minimising clearance and disturbance of native vegetation;
 - minimising erosion and sedimentation;
 - achieving applicable standards and goals; and
 - rehabilitating disturbed areas.

62. The Applicant must implement the approved Exploration Activities and Minor Surface Infrastructure Management Plan for the development.

Note: This condition does not apply to the construction of approved surface infrastructure for the development

REHABILITATION

Rehabilitation Objectives

63. The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be consistent with the proposed rehabilitation strategy described in the EIS (and depicted conceptually in Appendix 6), and comply with the objectives in Table 18.

Table 18: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole)	• Safe, stable and non-polluting • Final landforms designed to incorporate micro-relief and integrate with surrounding natural landforms • Final landforms maximise geotechnical performance, stability and hydrological function • Constructed landforms maximise surface water drainage to the natural environment • Minimise long term groundwater seepage from the site to ensure negligible environmental consequences beyond those predicted for the development • Minimise visual impact of final landforms as far as is reasonable and feasible
Surface infrastructure	• To be decommissioned and removed, unless the Secretary agrees otherwise
Final Voids	• No final void and free-draining to the natural drainage system
Agricultural Land	• Restore or maintain land capability generally as described in the EIS and shown conceptually in Appendix 7, including at least. - o 319.5 hectares of LSC Class 3 land; - o 172.3 hectares of LSC Class 4 land; and - o 423.1 hectares of BSAL-equivalent land
Woodland revegetation	• Native vegetation to be re-established, with the restoration of at least 33.6 hectares of native vegetation on LSC Class 6 or 7 land.
Community	• Ensure public safety • Minimise the adverse socio-economic effects associated with mine closure

Progressive Rehabilitation

64. The Applicant must rehabilitate the site progressively 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 rehabilitation strategies must be employed when areas prone to dust generation cannot yet be permanently rehabilitated.

Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the development.

Rehabilitation Management Plan

65. Prior to carrying out any development under this consent, unless otherwise agreed by the Secretary, the Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with the Department, DPI, OEH, Council and the CCC;
 - be prepared in accordance with any relevant NSW Government mining rehabilitation guidelines;
 - include a detailed soil balance for the development;
 - include a detailed plan for reinstatement and review of the proposed:
 - agricultural land capability across the site, including a protocol for periodic trials to demonstrate that the land capability is being achieved;
 - BSAL, including a protocol for verification of the land as BSAL-equivalent land; and
 - woodland areas;
 - include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);
 - describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including mine closure, final landform, final land use and post mining social impacts;
 - describe the rehabilitation methodologies that will be implemented to achieve the rehabilitation performance measures;
 - describe a process for managing minor delays or changes to progressive rehabilitation forecasts;

- (i) include interim rehabilitation where necessary to minimise the area exposed for dust generation;
- (j) 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
- (k) build to the maximum extent practicable on the other management plans required under this consent.

Notes:

- *The Mine Operations Plan (MOP) may be used to address the requirements of the Rehabilitation Management Plan required under this condition. However, the MOP must clearly document how the requirements of this condition have been met.*

66. The Applicant must implement the approved Rehabilitation Management Plan for the development.

AGRICULTURE

67. The Applicant shall use its best endeavours to ensure that the agricultural productivity and production of non-operational land related to the development is maintained or enhanced consistent with current agricultural land use.

This includes properties primarily used for agriculture that have been, or are, acquired by the Applicant due to noise and/or air quality impacts. However, it does not include land:

- where disturbance is permitted under the conditions of this consent; or
- that forms part of the biodiversity offset strategy, except for the areas of land identified on the figures in Appendix 4 as being retained for agricultural production during the life of the development.

68. The Applicant shall use its best endeavours to maintain or enhance the soil hydrology farming techniques on the Tarwyn Park property, and make reasonable access to the property available for external study by applicable scientific organisations (such as CSIRO, universities and government authorities) upon request.

SOCIAL

69. Within 12 months of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Social Impact Management Plan to the satisfaction of the Secretary. This plan must

- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
- (b) be prepared in consultation with Council, the CCC and the local community of Bylong;
- (c) identify negative social impacts resulting from the project during construction, operations and following closure in both a local and regional context;
- (d) include an adaptive management and mitigation program to minimise and/or mitigate negative social impacts during construction, operations and following closure;
- (e) include a detailed description of the measures that would be implemented to:
 - maintain and manage land and assets owned by the Applicant in Bylong Village;
 - assist in maintaining services for the local community; and
 - minimise the adverse social impacts associated with mine closure;
- (f) include a program to monitor, review and report on the effectiveness of these measures, including updating the plan 3 years prior to mine closure.

69. The Applicant must implement the approved Social Impact Management Plan for the development.

SCHEDULE 5 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS/ TENANTS

1. Within 2 months of the date of this consent, the Applicant must:
 - (a) notify in writing the owners of:
 - the residences listed in Table 3 of schedule 4 that they have the right to require the Applicant to acquire their land during the development, as specified in condition 2 of Schedule 4;
 - any residence on the land listed in Table 4 of schedule 4 that they have the right to request the Applicant to ask for additional noise mitigation measures to be installed at their residence at any stage during the development; and
 - any privately-owned land within 3 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 consent; 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 EIS identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in schedule 4 at any time during the life of the development.
2. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant 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 consent, 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 4, the Applicant must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and
 - (b) an exceedance of the relevant air quality criteria in schedule 4, the Applicant 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 an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 4, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
 - consult with the landowner to determine his/her concerns;
 - conduct monitoring to determine whether the development is complying with the relevant criteria in schedule 4; and
 - if the development is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

Note: Where the independent review finds that the development is not complying with applicable criteria, the Department may take enforcement action under the EP&A Act to ensure compliance with the consent.

LAND ACQUISITION

5. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:
 - (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, 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 land 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;
 - (b) the reasonable costs associated with:

- relocating within the Mid-Western Regional Council, Muswellbrook Shire Council or Upper Hunter Shire Council local government areas, or to any other local government area determined by the Secretary; and
 - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
- (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Applicant 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 will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:

- consider submissions from both parties;
- 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;
- prepare a detailed report setting out the reasons for any determination; and
- provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer's report, the Applicant 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 will 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, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.

Within 14 days of this determination, the Applicant 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 Applicant's binding written offer under this condition within 6 months of the offer being made, unless the Secretary determines otherwise, then the Applicant's obligations to acquire the land shall cease.

6. The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 5 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 the Registrar-General.
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SCHEDULE 6
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. Prior to carrying out any development under this consent, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval, unless otherwise agreed;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (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 mine;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring to be carried out in relation to the development.
2. The Applicant must implement the approved Environmental Management Strategy for the development.

Adaptive Management

3. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedules 3 and 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent 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 Applicant 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 reasonable remediation measures as directed by the Secretary.

Management Plan Requirements

4. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (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 or triggers that are proposed to be used to judge the performance of, or guide the implementation of, the development 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 development;
 - effectiveness of any management measures (see c above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences;
 - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (g) 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
 - (h) a protocol for periodic review of the plan.

Revision of Strategies, Plans and Programs

5. Within 3 months, unless otherwise agreed with the Secretary, of:
 - (a) the submission of an incident report under condition 9 below;
 - (b) the submission of an annual review under condition 11 below;
 - (c) the submission of an audit under condition 13 below; and
 - (d) the approval of any modification to the conditions of this consent; or
 - (e) a direction of the Secretary under condition 4 of schedule 2;the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent 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, unless otherwise agreed with the Secretary.

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

Updating & Staging of Strategies, Plans or Programs

6. To ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development, the Applicant may submit revised strategies, plans or programs required under this consent at any time. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.

The Secretary may approve a revised strategy, plan or program required under this consent, or the staged submission of any of these documents, at any time. With the agreement of the Secretary, the Applicant may prepare the revised or staged strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent.

Notes:

- *While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.*
- *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.*

Relationships between Management Plans

7. The Water, Biodiversity and Heritage Management Plans required under Schedule 4 are to be prepared in respect of all parts of the development that are not covered by an Extraction Plan approved under condition 6 of Schedule 3. In particular, those management plans should address all areas subject to existing or proposed surface disturbance associated with the development.

COMMUNITY CONSULTATIVE COMMITTEE

8. The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in accordance with the *Community Consultative Committee Guidelines, State Significant Projects* (Department of Planning, November 2016) or its latest version.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*
- *In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, local community representatives and stakeholder groups.*

REPORTING

Incident Reporting

9. The Applicant must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant 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

10. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

Annual Review

11. By the end of March each year, the Applicant must submit a review of the environmental performance of the development for the previous calendar year to the satisfaction of the Secretary. This review must:
- describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;
 - include a comprehensive review of the monitoring results and complaints records of the development over the past 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 EIS;
 - identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - identify any trends in the monitoring data over the life of the development;
 - identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - describe what measures will be implemented over the next year to improve the environmental performance of the development.

Note: The "Post Approval Requirements for State Significant Developments - Annual Review Guideline 2015, NSW Government, October 2015" (or its latest version) provides a reporting framework to integrate the reporting requirements of the Annual Review required by the Department under the development consent and the Annual Environment Management Report (AEMR) required under the Mining Lease.

INDEPENDENT ENVIRONMENTAL AUDIT

Independent Environmental Audit

12. Within one year of the date of commencement of development and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
- be conducted by a suitably qualified lead auditor and suitably qualified, experienced and independent team of experts in any field specified by the Secretary, whose appointment has been endorsed by the Secretary;
 - include consultation with the relevant agencies;
 - assess the environmental performance of the development and assess whether it is complying with the requirements in this consent, and any relevant EPL or Mining Lease/s (including any assessment, plan or program required under these approvals);
 - review the adequacy of any strategies, plans or programs required under the abovementioned approvals; and
 - recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under the abovementioned approvals; and
 - be conducted and reported to the satisfaction of the Secretary.

Note: The "Post Approval Requirements for State Significant Developments - Independent Audit Guideline, NSW Government, October 2015" (or its latest version) provides an audit and reporting framework for the independent audit that will guide compliance with this condition.

13. Within 12 weeks of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report and a timetable for the implementation of these recommendations as required.
14. The Applicant must implement these recommendations, to the satisfaction of the Secretary.

ACCESS TO INFORMATION

15. From the commencement of development under this consent, the Applicant shall:
- Make copies of the following information publicly available on its website:
 - the EIS;
 - current statutory approvals for the development;
 - approved strategies, plans or programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a summary of complaints, which is to be updated monthly;
 - minutes of CCC meetings;
 - the last five annual reviews;
 - any independent environmental audit, and the Applicant's response to the recommendations in any audit;
 - any other matter required by the Secretary; and
 - keep this information up to date.

APPENDIX 1- SCHEDULE OF LAND

Lot	DP	Land Tenure
1	722162	Crown
3	191508	Crown (Transport for NSW)
4	191508	Crown (Transport for NSW)
4	755438	Crown
56	755420	Crown
57	755420	Crown
65	755417	Crown
85	755438	Crown
95	45337	Crown
97	45338	Crown
98	704724	Crown
7001	96938	Crown
7300	1137901	Crown
1	1150843	Freehold
53	755420	Freehold
55	755420	Freehold
66	755420	Freehold
90	755420	Freehold
59	755420	Freehold
60	755420	Freehold
73	755420	Freehold
74	755420	Freehold
1	198907	Freehold
1	223632	Freehold
1	512928	Freehold
1	618119	Freehold
1	1146893	Freehold
2	222796	Freehold
2	223632	Freehold
2	512025	Freehold
2	618119	Freehold
2	810449	Freehold
2	1150843	Freehold
2	1146893	Freehold
3	222796	Freehold
3	618119	Freehold
3	755420	Freehold
3	1150843	Freehold
4	755420	Freehold
4	1150843	Freehold
5	114659	Freehold
5	755420	Freehold
5	1150843	Freehold
6	1150843	Freehold

Lot	DP	Land Tenure
6	114659	Freehold
6	755420	Freehold
7	114602	Freehold
7	114659	Freehold
7	755420	Freehold
9	755438	Freehold
21	755420	Freehold
23	755420	Freehold
24	755420	Freehold
25	755420	Freehold
46	755420	Freehold
47	755420	Freehold
53	755438	Freehold
54	755438	Freehold
57	755438	Freehold
68	755438	Freehold
78	755438	Freehold
86	755421	Freehold
87	755421	Freehold
88	755421	Freehold
89	755421	Freehold
94	45337	Freehold
185	755421	Freehold
187	755421	Freehold
188	755421	Freehold
206	755421	Freehold
30	755438	Freehold
59	755438	Freehold
1	1188987	Freehold
79	755438	Crown (Minister for Education and Training)
1	348810	Freehold
1	222796	Freehold
12	755438	Freehold
100	778500	Freehold
1	1094509	Freehold
2	1094509	Freehold
9	755420	Freehold
10	755420	Freehold
15	755420	Freehold
16	1109210	Freehold
17	755420	Freehold
49	755420	Freehold
50	755420	Freehold
1	108141	Crown (Transport for NSW)
1	191508	Crown (Transport for NSW)
1	430939	Crown (Transport for NSW)

Lot	DP	Land Tenure
1	430964	Crown (Transport for NSW)
1	436556	Crown (Transport for NSW)
2	191508	Crown (Transport for NSW)
2	430939	Crown (Transport for NSW)
2	436556	Crown (Transport for NSW)
3	431442	Crown (Transport for NSW)
4	431442	Crown (Transport for NSW)
5	431442	Crown (Transport for NSW)
1	607945	Freehold
1	439505	Freehold
1	245047	Freehold
1	114659	Freehold
2	607945	Freehold
2	1100343	Freehold
2	114659	Freehold
2	245047	Freehold
3	1146893	Freehold
3	114659	Freehold
4	1146893	Freehold
4	114659	Freehold
11	755420	Freehold
12	755420	Freehold
21	755438	Freehold
31	755420	Freehold
32	755420	Freehold
33	755420	Freehold
35	755420	Freehold
40	755438	Freehold
40	755420	Freehold
41	755438	Freehold
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42	755438	Freehold
43	755438	Freehold
44	755438	Freehold
45	755438	Freehold
50	755417	Freehold
51	755417	Freehold
51	755438	Freehold
52	755417	Freehold
52	755438	Freehold
52	755420	Freehold
53	755417	Freehold
55	755417	Freehold
55	755438	Freehold
56	755438	Freehold
61	755417	Freehold

Lot	DP	Land Tenure
61	755438	Freehold
67	755420	Freehold
68	755420	Freehold
70	755420	Freehold
71	755420	Freehold
74	755438	Freehold
85	755417	Freehold
86	755417	Freehold
99	704724	Freehold
101	778500	Freehold

Notes:

1. The cadastral information for the lands to which the Application applies was sourced from the NSW LPI records database in June 2015.
2. The Development Application Area is shown in Appendix 2, Figure 2-1 as indicated by the project boundary.

APPENDIX 2 - DEVELOPMENT LAYOUT PLANS

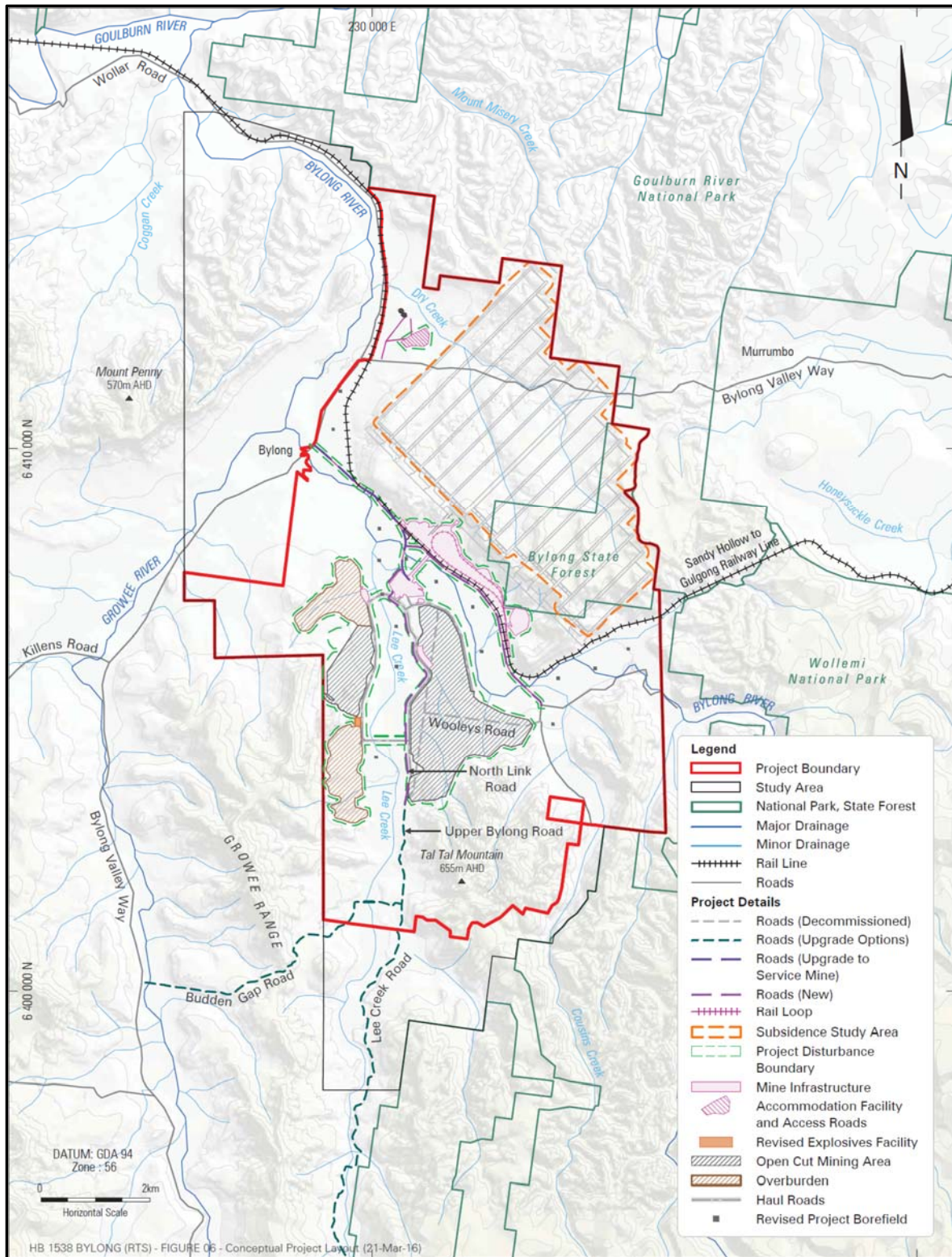


Figure 2-1: General Development Layout

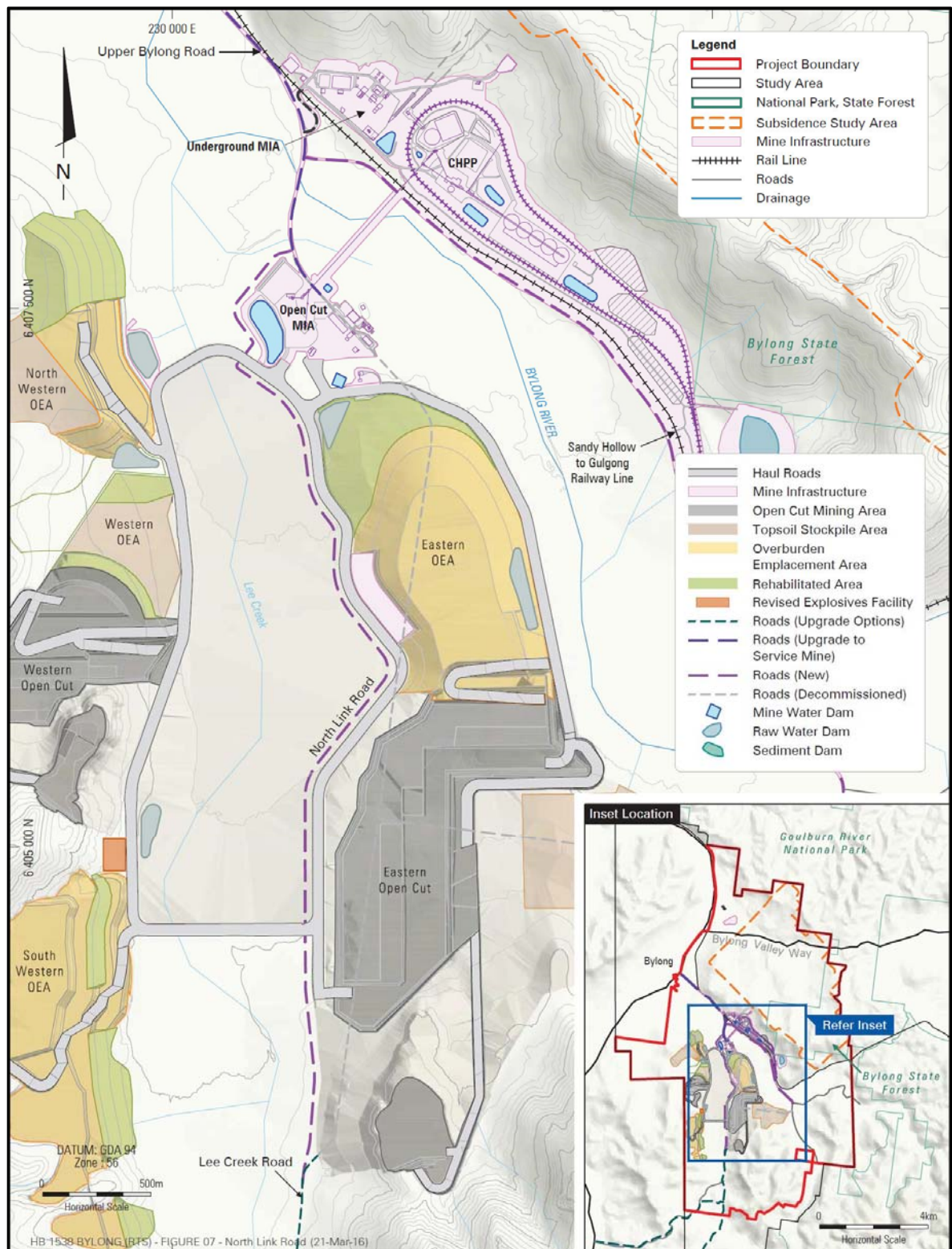


Figure 2-2: Mine Infrastructure Areas and North Link Road

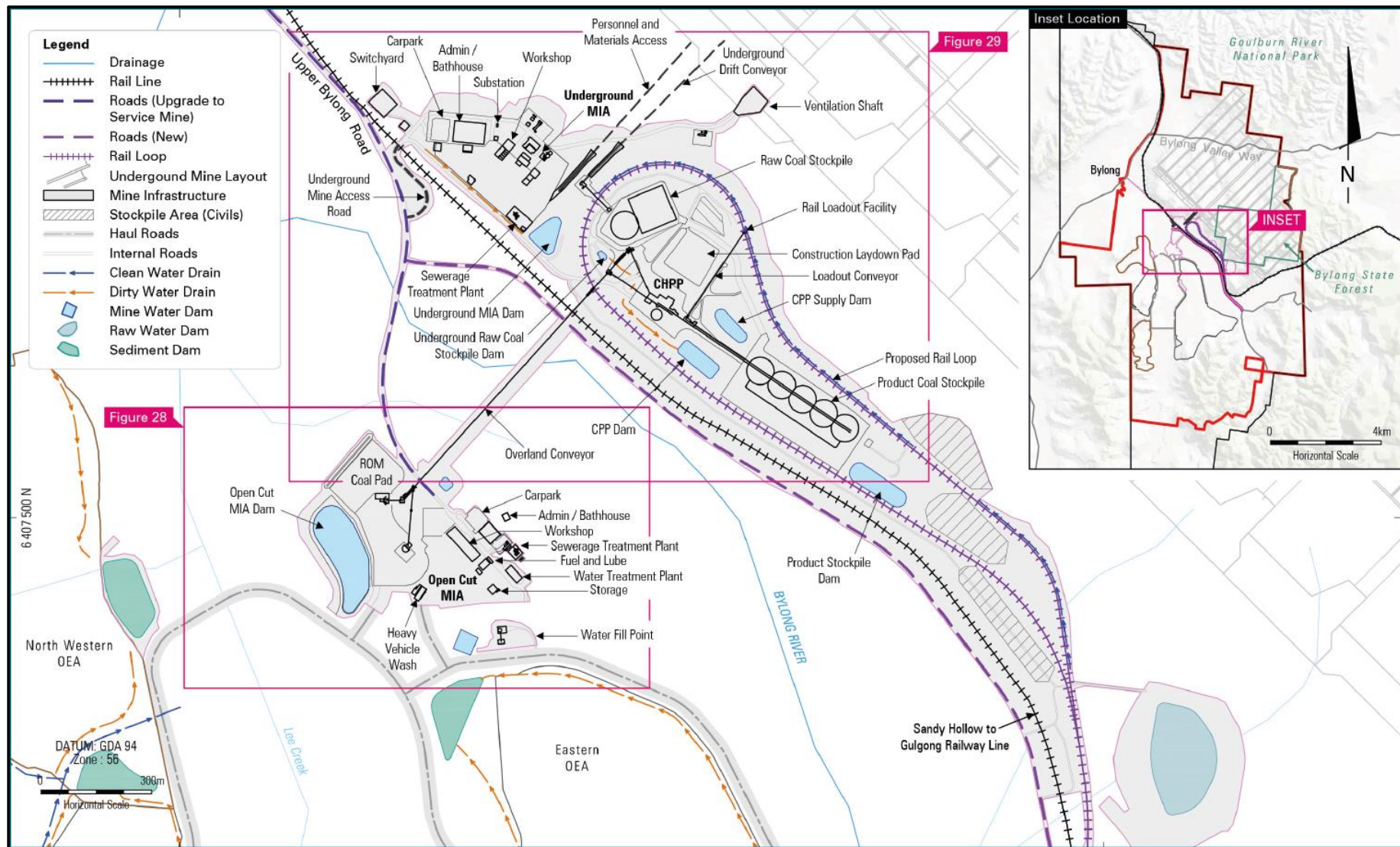


Figure 2-3: Conceptual Mine Infrastructure Areas

APPENDIX 3 - LAND OWNERSHIP PLANS

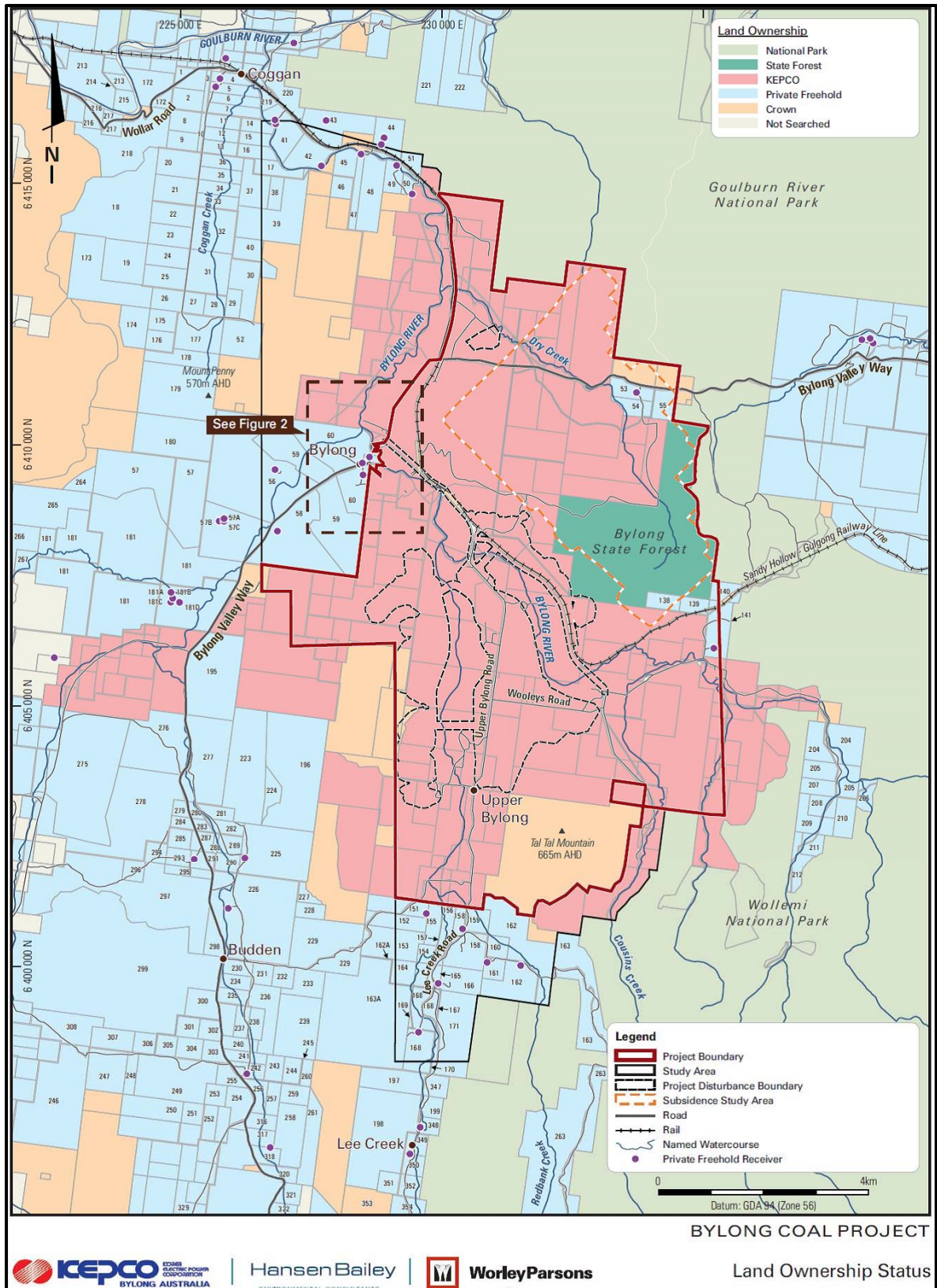


Figure 3-1: Landownership

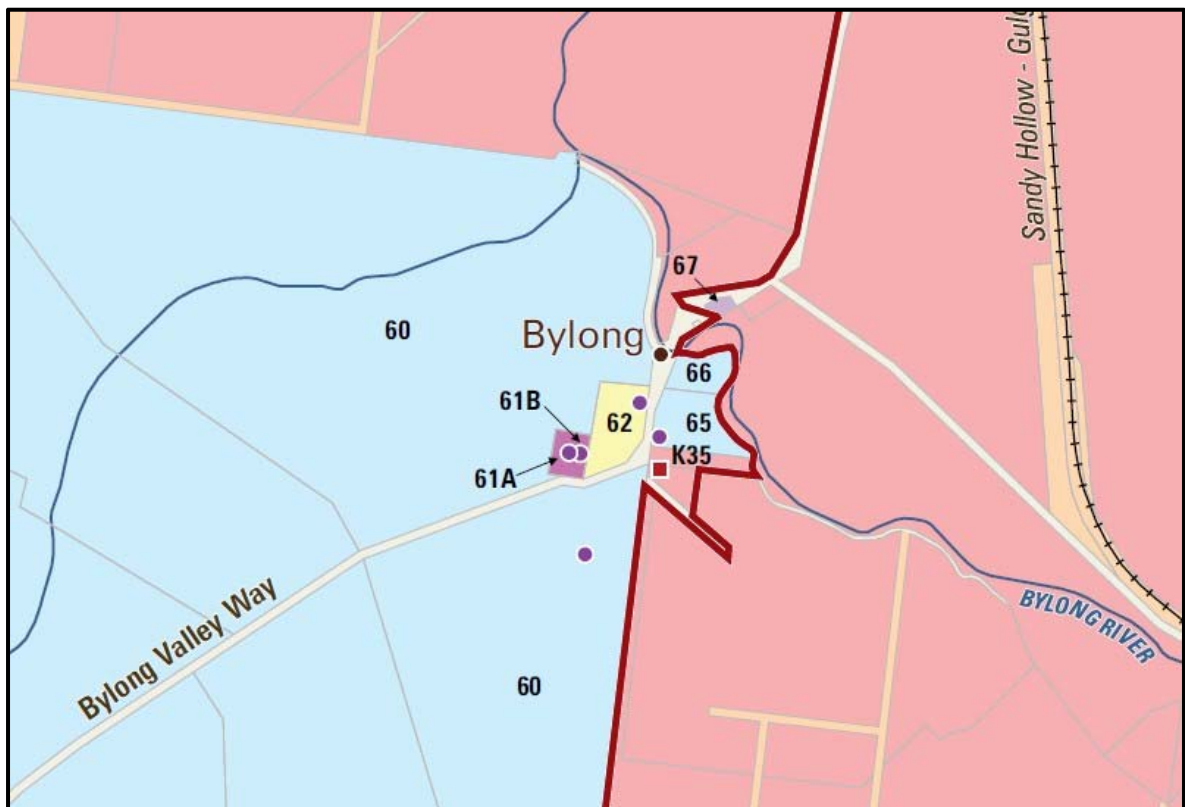


Figure 3-2: Landownership Bylong Village Area

APPENDIX 4 - BIODIVERSITY OFFSETS

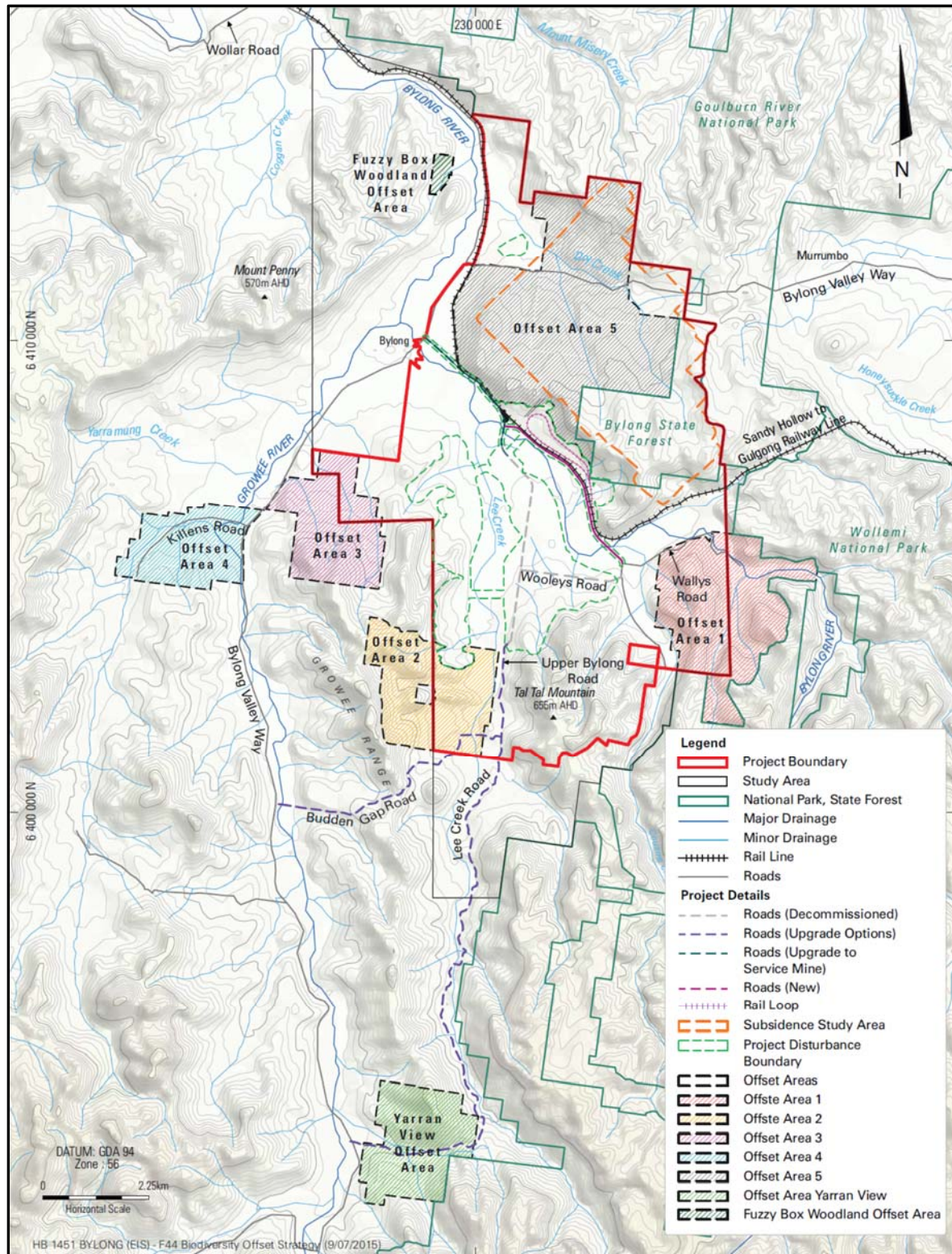


Figure 4-1: Biodiversity Offset Areas

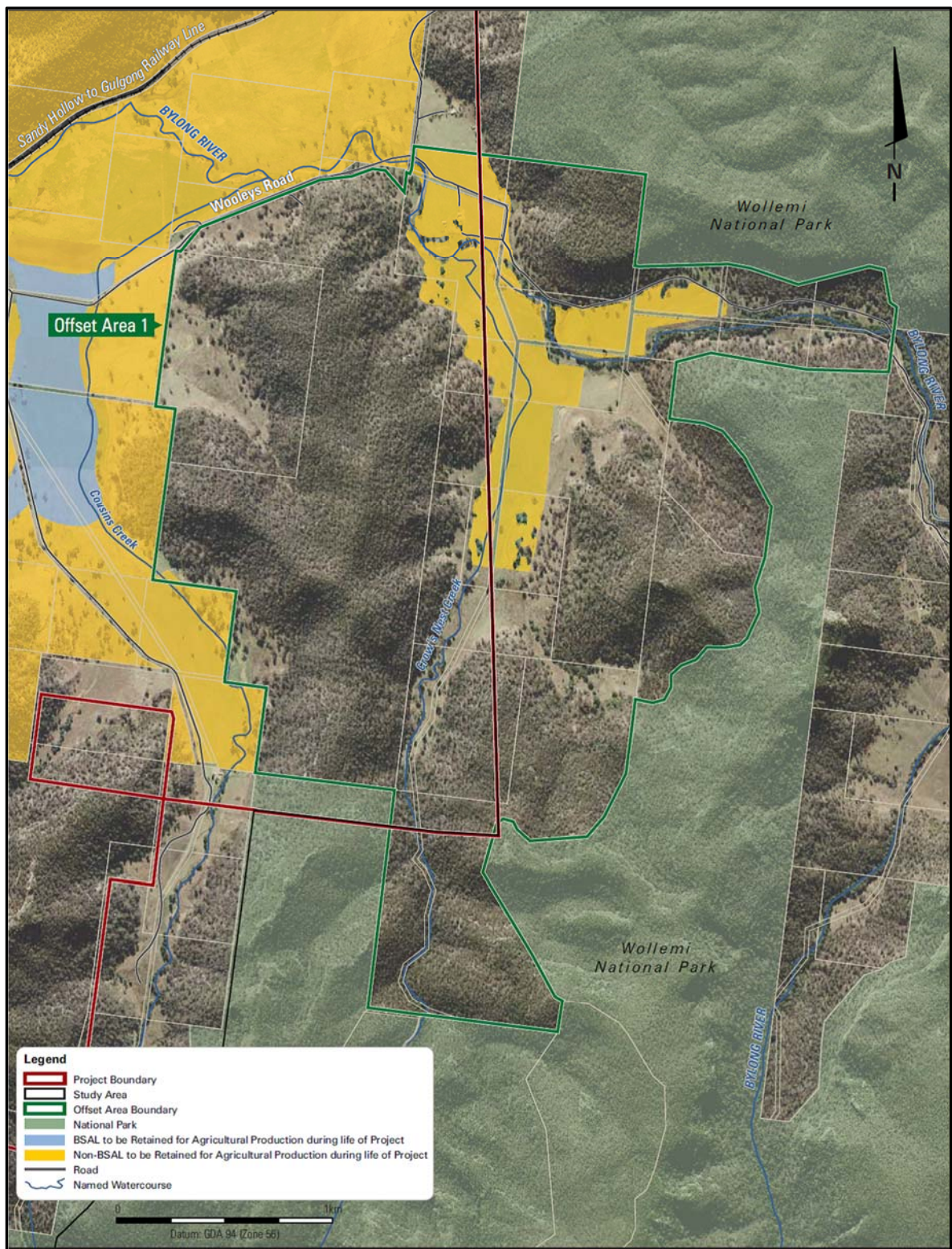


Figure 4-2: Offset Area 1 – Land Use

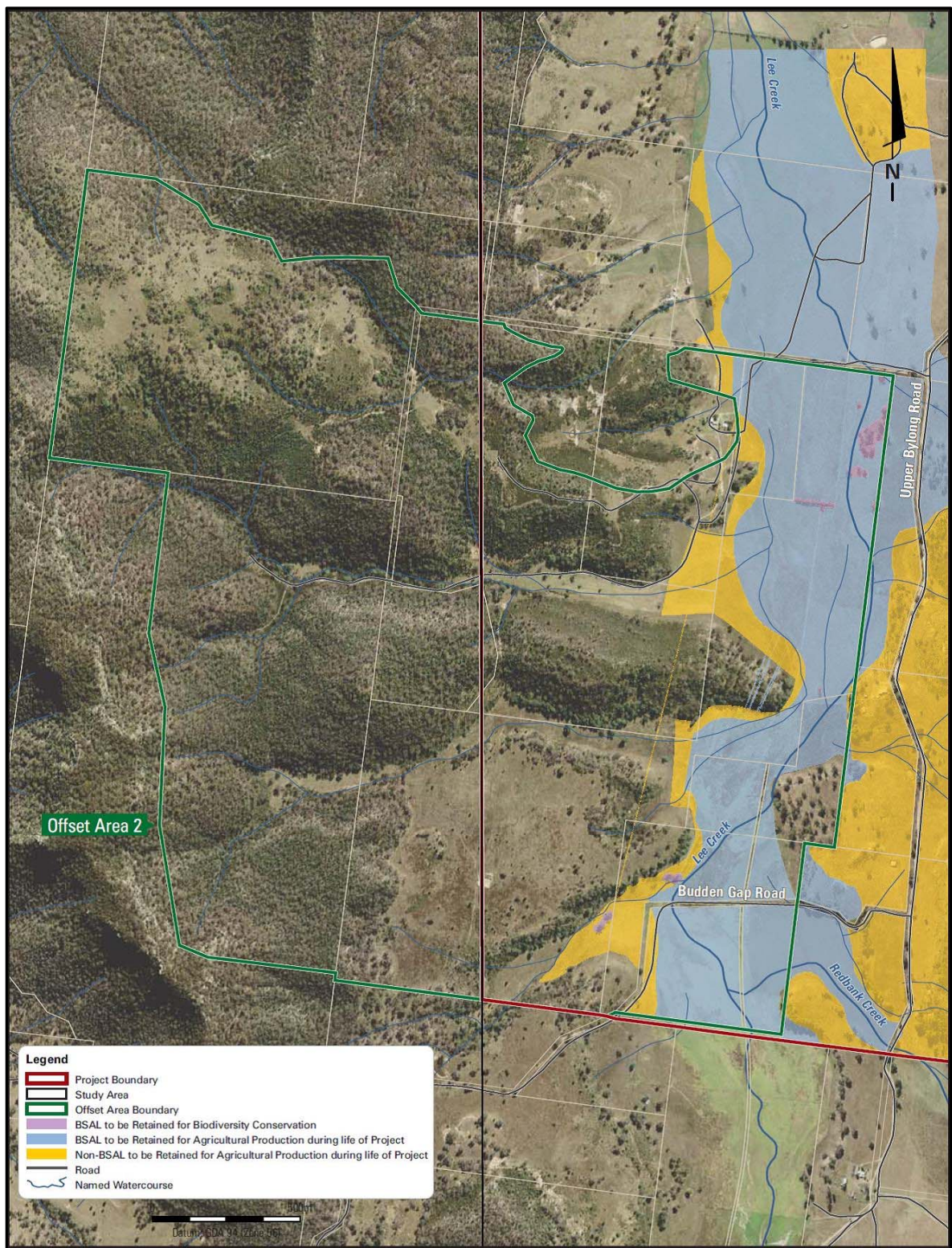


Figure 4-3: Offset Area 2 – Land Use

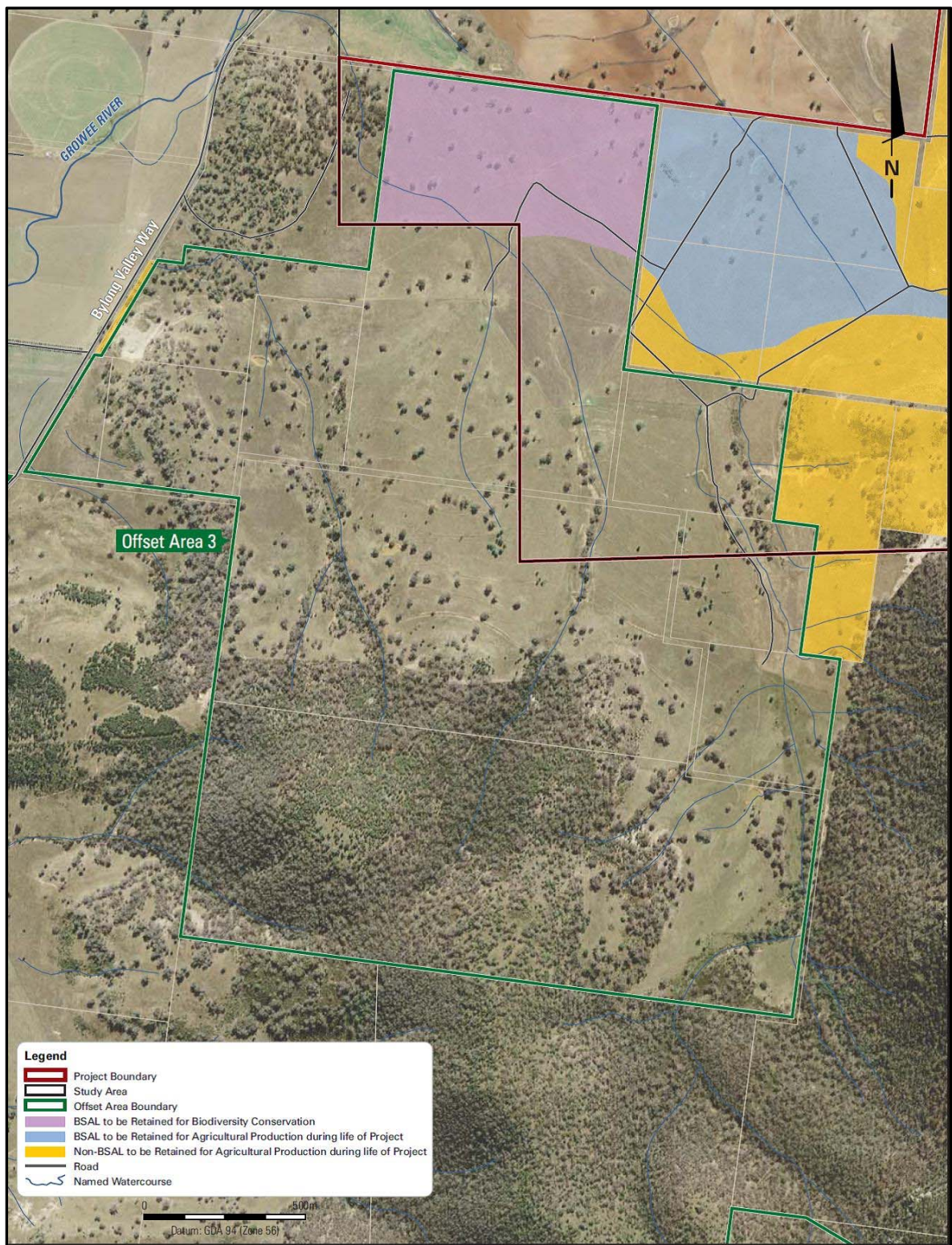


Figure 4-4: Offset Area 3 – Land Use

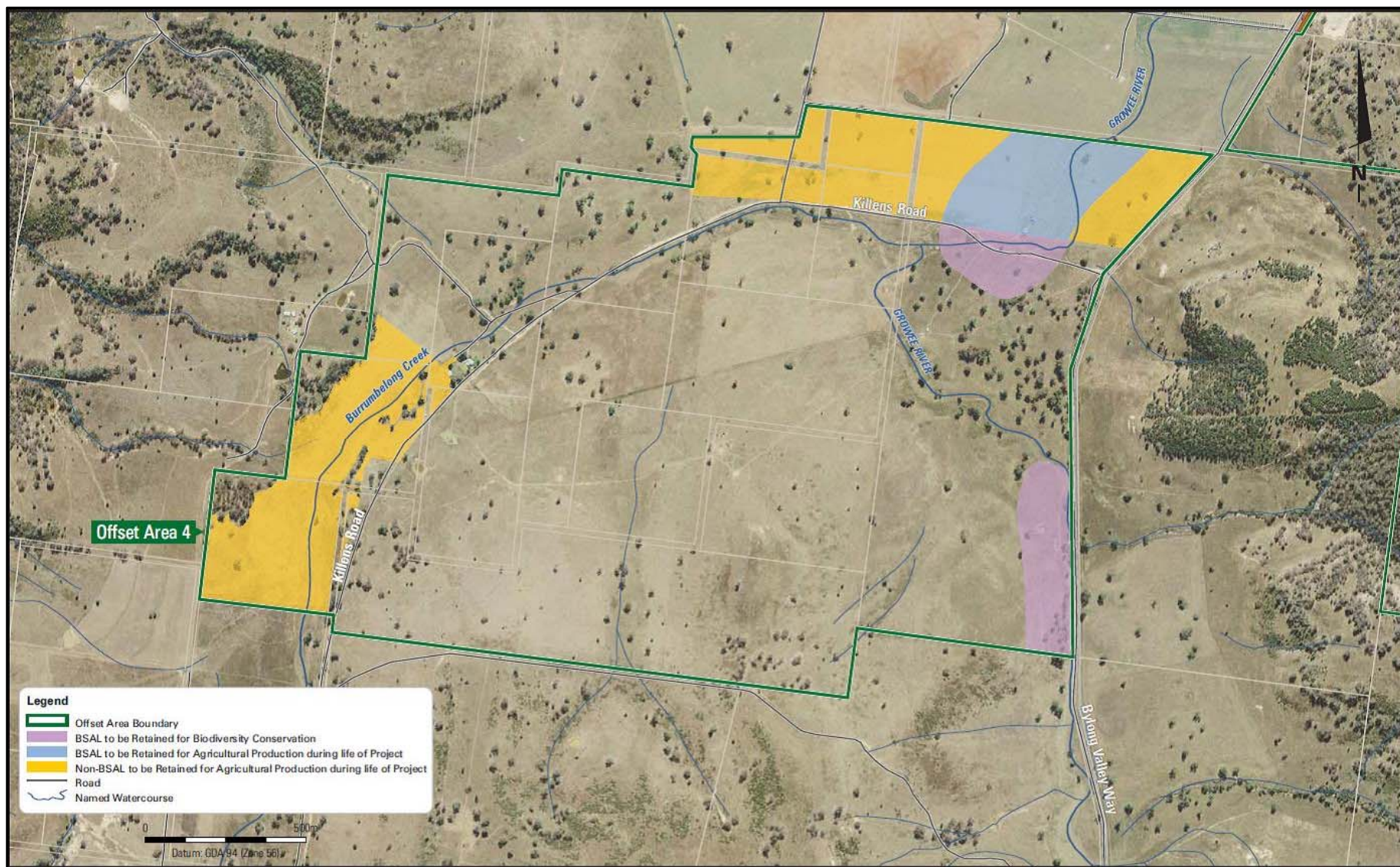


Figure 4-5: Offset Area 4 – Land Use

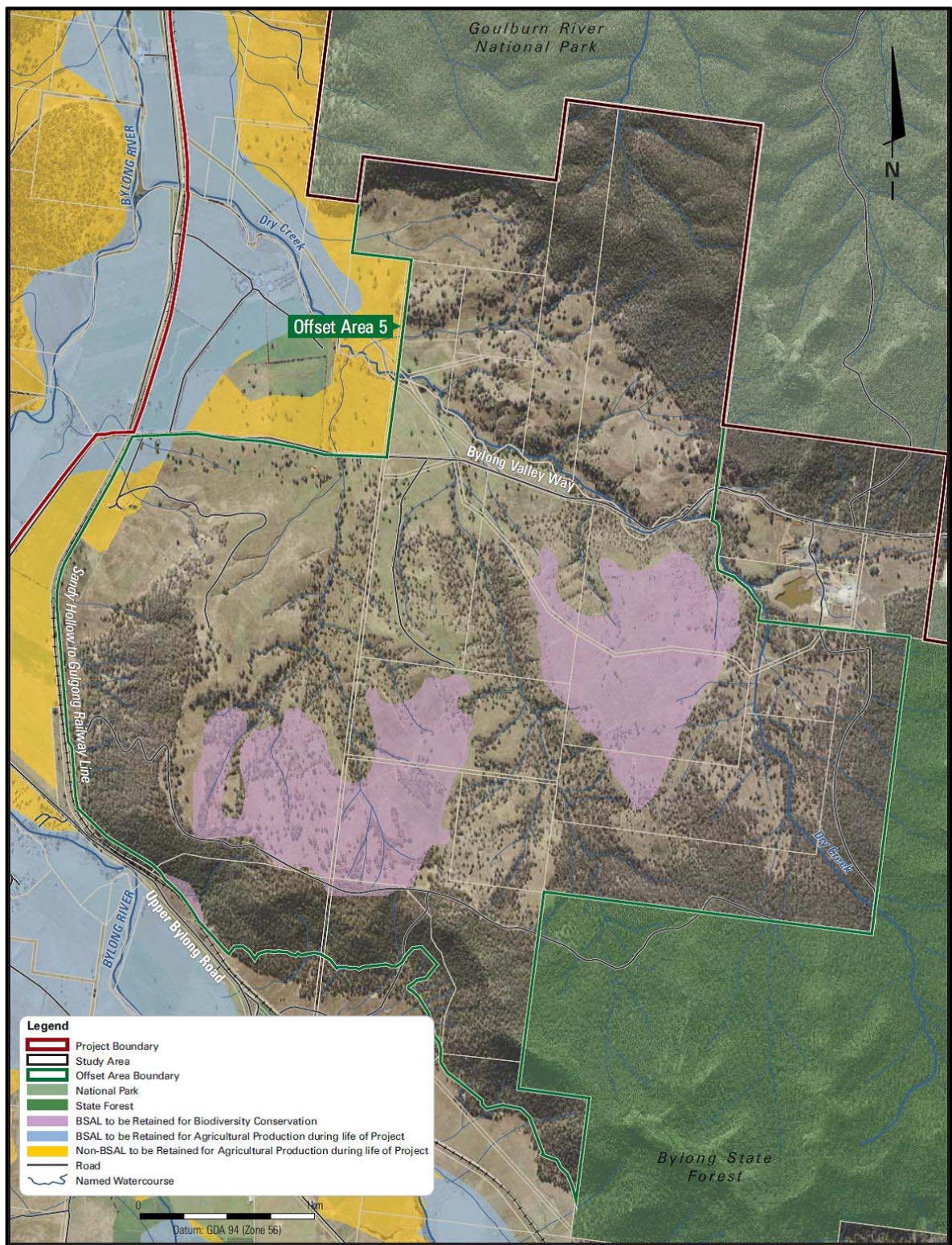


Figure 4-6: Offset Area 5 – Land Use

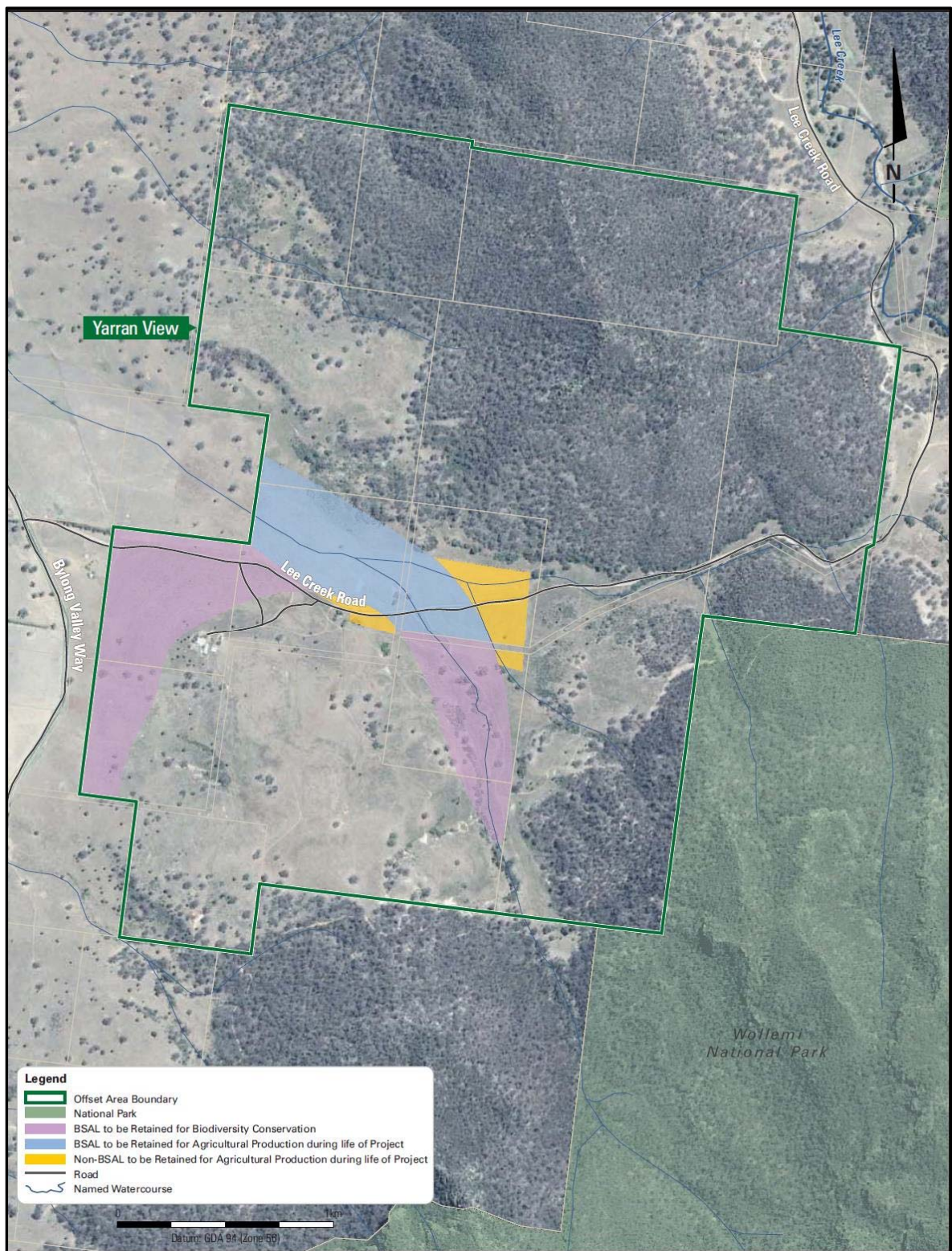


Figure 4-7: Yarran View Offset – Land Use

APPENDIX 5 - NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Tables 5 and 6 of Schedule 4 are to apply under all meteorological conditions except the following:
 - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - (b) stability category F temperature inversions and wind speeds greater than 2 m/s at 10 m above ground level; or
 - (c) stability category G temperature inversion conditions.

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 located on the site.

Compliance Monitoring

3. Attended monitoring is to be used to evaluate compliance with the relevant conditions of this consent.
4. This monitoring must be carried out at least 12 times a year, unless the Secretary directs otherwise.
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 data, 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.
6. The assessment of excessive levels of low frequency noise generated by the mine shall be as follows: Measure/assess C- and A-weighted Leq,T levels over same time period. Where the C minus A level is 15dB or more and:
 - where any of the 1/3 octave noise levels in Table 5-1 are exceeded by up to 5dB and cannot be mitigated, a 2 dB(A) positive adjustment to measured/predicted A weighted levels applies for the evening/night period.
 - where any of the 1/3 octave noise levels in Table 5-1 are exceeded by more than 5dB and cannot be mitigated, a 5 dB(A) positive adjustment to measured/predicted A weighted levels applies for the evening/night period and a 2dB positive adjustment applies for the daytime period.

Table 5-1: One-third octave low frequency noise thresholds

Hz/dB(Z)	One-third octave L _{Zeq,15minute} threshold level												
Frequency (Hz)	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160
dB(Z)	92	89	86	77	69	61	54	50	50	48	48	46	44

APPENDIX 6 - HERITAGE MAPS AND TABLES

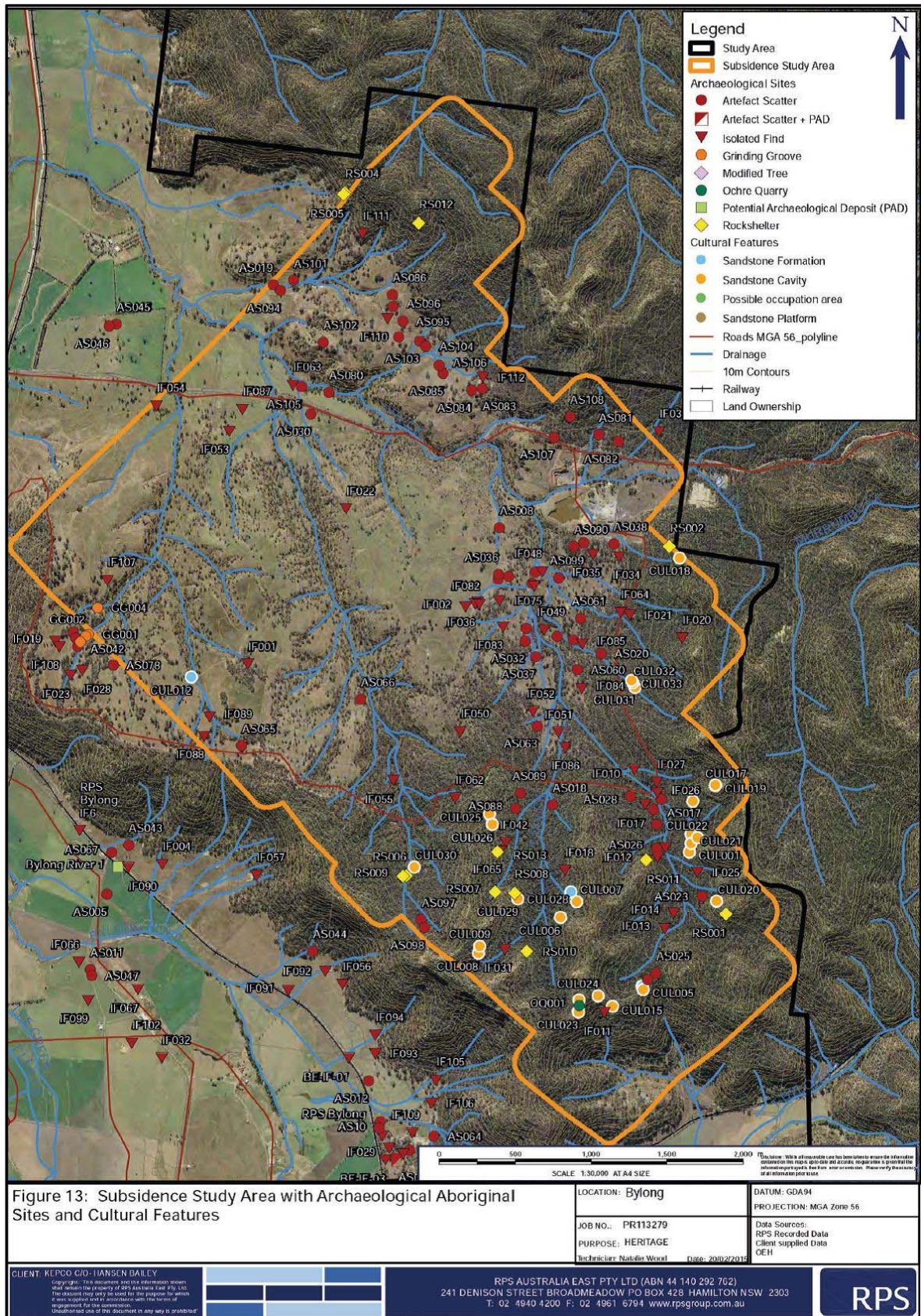


Figure 6-1: Aboriginal Sites within and around Subsidence Area

Table 6-1 – Aboriginal Sites in and immediately adjacent to the Subsidence Study Area (source Table 35 Appendix S EIS)

Site Type	Site Name	Summary of Potential Subsidence Impact	Pre-Mining Phase 1 Mitigation	Post- Mining Phase 2 Mitigation
Ochre Quarry	OQ001	Cracking / Rockfall	Archival Recording	Monitoring
Grinding Groove	GG001	None – offset impact to GG004	Archival Recording	None Required
Grinding Groove	GG002		Archival Recording	None Required
Grinding Groove	GG003		Archival Recording	None Required
Grinding Groove	GG004	Cracking	Archival Recording	Monitoring
Rockshelter	RS001	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Rockshelter	RS002	Negligible	Archival Recording	None
Rockshelter	RS006	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Rockshelter	RS007	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Rockshelter	RS008	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Rockshelter	RS009	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Rockshelter	RS010	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Rockshelter	RS011	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Rockshelter	RS012	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Rockshelter	RS013	Cracking	Test Excavation	Mitigation post mining dependent on results of pre-mining test excavation
Cultural Feature	CUL004	Cracking / Rockfall	Archival Recording	Monitoring
Cultural Feature	CUL007	Cracking / Rockfall	Archival Recording	Monitoring
Cultural Feature	CUL001	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL002	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL003	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL005	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL006	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL008	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL009	Cracking	Inspection and Archival Recording	Monitoring

Site Type	Site Name	Summary of Potential Subsidence Impact	Pre-Mining Phase 1 Mitigation	Post- Mining Phase 2 Mitigation
Cultural Feature	CUL012	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL013	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL015	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL016	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL017	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL018	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL019	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL020	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL021	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL022	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL023	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL024	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL025	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL026	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL027	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL028	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL029	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL030	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL031	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL032	Cracking	Inspection and Archival Recording	Monitoring
Cultural Feature	CUL033	Cracking	Inspection and Archival Recording	Monitoring
Surface Artefacts	Various	Vehicle Impacts	Collection of artefacts in tracks	Monitoring

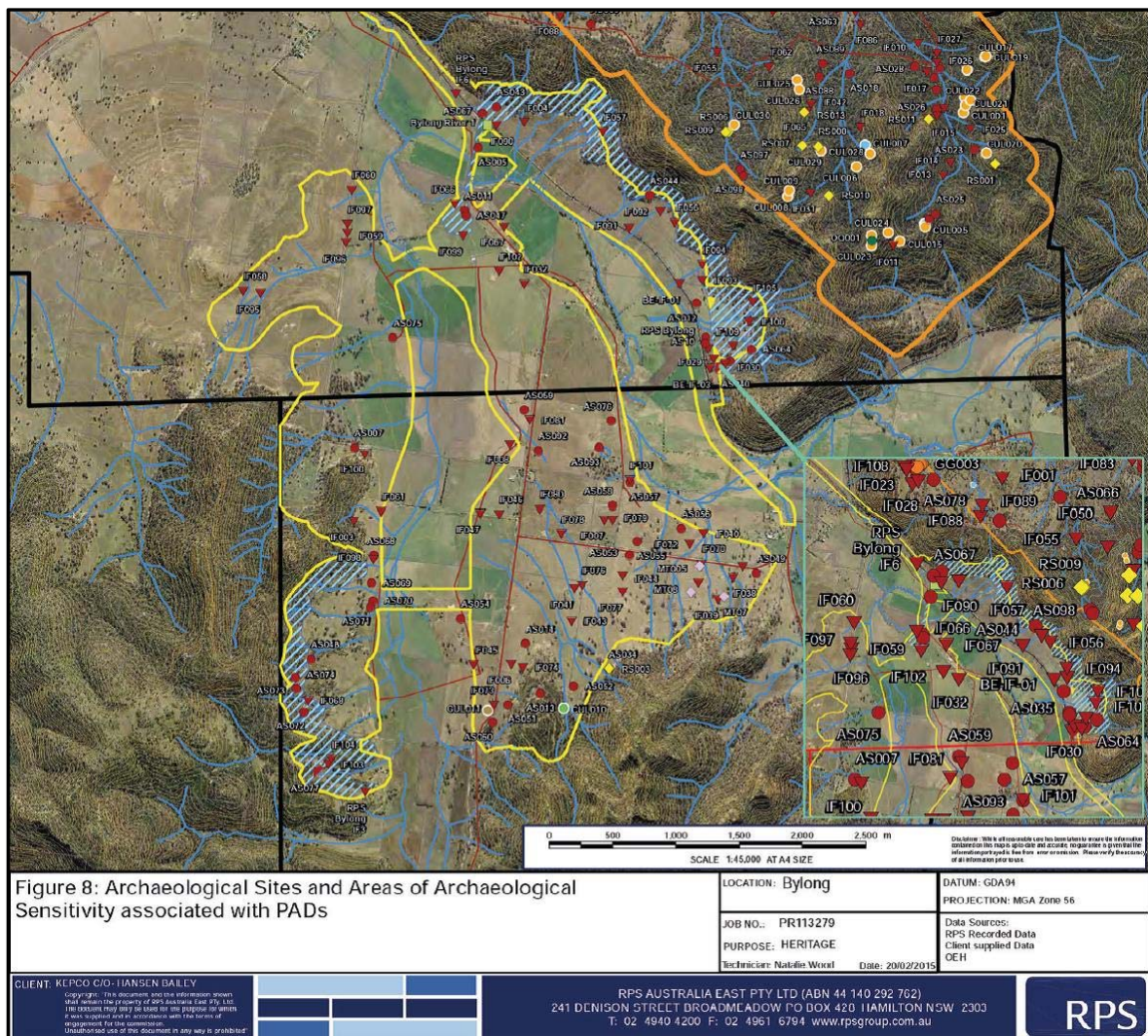


Figure 6-2: Aboriginal Sites Open Cut and Surface Infrastructure Areas

Table 6-2 Aboriginal Sites in the Project Disturbance Boundary (Source Table 37 of Appendix S of the EIS)

Site Type	Site Code	Impact	Mitigation
PAD	Bylong River PAD 1	Surface Impact	Excavation
PAD + Artefacts	AS077	Surface Impact	Excavation
Modified Tree	MT005	Surface Impact	Conservation by controlled removal
Modified Tree	MT007	Surface Impact	Conservation by controlled removal
Modified Tree	MT008	Surface Impact	Conservation by controlled removal
Cultural Feature	CUL010	Surface Impact	Archival Recording
Cultural Feature	CUL011	Surface Impact	Archival Recording
Artefact Scatter	AS005	Surface Impact	Collection
Artefact Scatter	AS007	Surface Impact	Collection
Artefact Scatter	AS011	Surface Impact	Collection
Artefact Scatter	AS012	Surface Impact	Collection
Artefact Scatter	AS013	Surface Impact	Collection
Artefact Scatter	AS014	Surface Impact	Collection
Artefact Scatter	AS035	Surface Impact	Collection
Artefact Scatter	AS043	Surface Impact	Collection
Artefact Scatter	AS044	Surface Impact	Collection

Site Type	Site Code	Impact	Mitigation
Artefact Scatter	AS045	Surface Impact	Collection
Artefact Scatter	AS046	Surface Impact	Collection
Artefact Scatter	AS047	Surface Impact	Collection
Artefact Scatter	AS048	Surface Impact	Collection
Artefact Scatter	AS049	Surface Impact	Collection
Artefact Scatter	AS050	Surface Impact	Collection
Artefact Scatter	AS051	Surface Impact	Collection
Artefact Scatter	AS052	Surface Impact	Collection
Artefact Scatter	AS053	Surface Impact	Collection
Artefact Scatter	AS055	Surface Impact	Collection
Artefact Scatter	AS056	Surface Impact	Collection
Artefact Scatter	AS057	Surface Impact	Collection
Artefact Scatter	AS058	Surface Impact	Collection
Artefact Scatter	AS059	Surface Impact	Collection
Artefact Scatter	AS067	Surface Impact	Collection
Artefact Scatter	AS068	Surface Impact	Collection
Artefact Scatter	AS069	Surface Impact	Collection
Artefact Scatter	AS070	Surface Impact	Collection
Artefact Scatter	AS071	Surface Impact	Collection
Artefact Scatter	AS072	Surface Impact	Collection
Artefact Scatter	AS073	Surface Impact	Collection
Artefact Scatter	AS074	Surface Impact	Collection
Artefact Scatter	AS075	Surface Impact	Collection
Artefact Scatter	AS076	Surface Impact	Collection
Artefact Scatter	AS092	Surface Impact	Collection
Artefact Scatter	AS093	Surface Impact	Collection
Isolated Find	BE-IF-01	Surface Impact	Collection
Isolated Find	BE-IF-02	Surface Impact	Collection
Isolated Find	BE-IF-03	Surface Impact	Collection
Isolated Find	Bylong River 1	Surface Impact	Collection
Artefact Scatter	RPS Bylong AS10	Surface Impact	Collection
Isolated Find	RPS Bylong IF3	Surface Impact	Collection
Isolated Find	RPS Bylong IF6	Surface Impact	Collection
Isolated Find	IF003	Surface Impact	Collection
Isolated Find	IF004	Surface Impact	Collection
Isolated Find	IF006	Surface Impact	Collection
Isolated Find	IF007	Surface Impact	Collection
Isolated Find	IF029	Surface Impact	Collection
Isolated Find	IF030	Surface Impact	Collection
Isolated Find	IF032	Surface Impact	Collection
Isolated Find	IF038	Surface Impact	Collection
Isolated Find	IF039	Surface Impact	Collection
Isolated Find	IF040	Surface Impact	Collection
Isolated Find	IF041	Surface Impact	Collection
Isolated Find	IF043	Surface Impact	Collection

Site Type	Site Code	Impact	Mitigation
Isolated Find	IF044	Surface Impact	Collection
Isolated Find	IF045	Surface Impact	Collection
Isolated Find	IF046	Surface Impact	Collection
Isolated Find	IF047	Surface Impact	Collection
Isolated Find	IF056	Surface Impact	Collection
Isolated Find	IF057	Surface Impact	Collection
Isolated Find	IF058	Surface Impact	Collection
Isolated Find	IF059	Surface Impact	Collection
Isolated Find	IF060	Surface Impact	Collection
Isolated Find	IF066	Surface Impact	Collection
Isolated Find	IF068	Surface Impact	Collection
Isolated Find	IF069	Surface Impact	Collection
Isolated Find	IF070	Surface Impact	Collection
Isolated Find	IF071	Surface Impact	Collection
Isolated Find	IF072	Surface Impact	Collection
Isolated Find	IF073	Surface Impact	Collection
Isolated Find	IF074	Surface Impact	Collection
Isolated Find	IF076	Surface Impact	Collection
Isolated Find	IF077	Surface Impact	Collection
Isolated Find	IF078	Surface Impact	Collection
Isolated Find	IF079	Surface Impact	Collection
Isolated Find	IF080	Surface Impact	Collection
Isolated Find	IF081	Surface Impact	Collection
Isolated Find	IF090	Surface Impact	Collection
Isolated Find	IF091	Surface Impact	Collection
Isolated Find	IF092	Surface Impact	Collection
Isolated Find	IF093	Surface Impact	Collection
Isolated Find	IF094	Surface Impact	Collection
Isolated Find	IF095	Surface Impact	Collection
Isolated Find	IF096	Surface Impact	Collection
Isolated Find	IF097	Surface Impact	Collection
Isolated Find	IF098	Surface Impact	Collection
Isolated Find	IF099	Surface Impact	Collection
Isolated Find	IF100	Surface Impact	Collection
Isolated Find	IF101	Surface Impact	Collection
Isolated Find	IF102	Surface Impact	Collection
Isolated Find	IF103	Surface Impact	Collection
Isolated Find	IF104	Surface Impact	Collection
Isolated Find	IF105	Surface Impact	Collection
Isolated Find	IF106	Surface Impact	Collection
Isolated Find	IF109	Surface Impact	Collection

Table 6-3 – Aboriginal sites – potential indirect impacts from blasting (sourced from Table 36 Appendix S of the EIS)

Site Type	Site Code	Impact	Mitigation
Rock-shelter	RS003	Blasting	Archival Recording

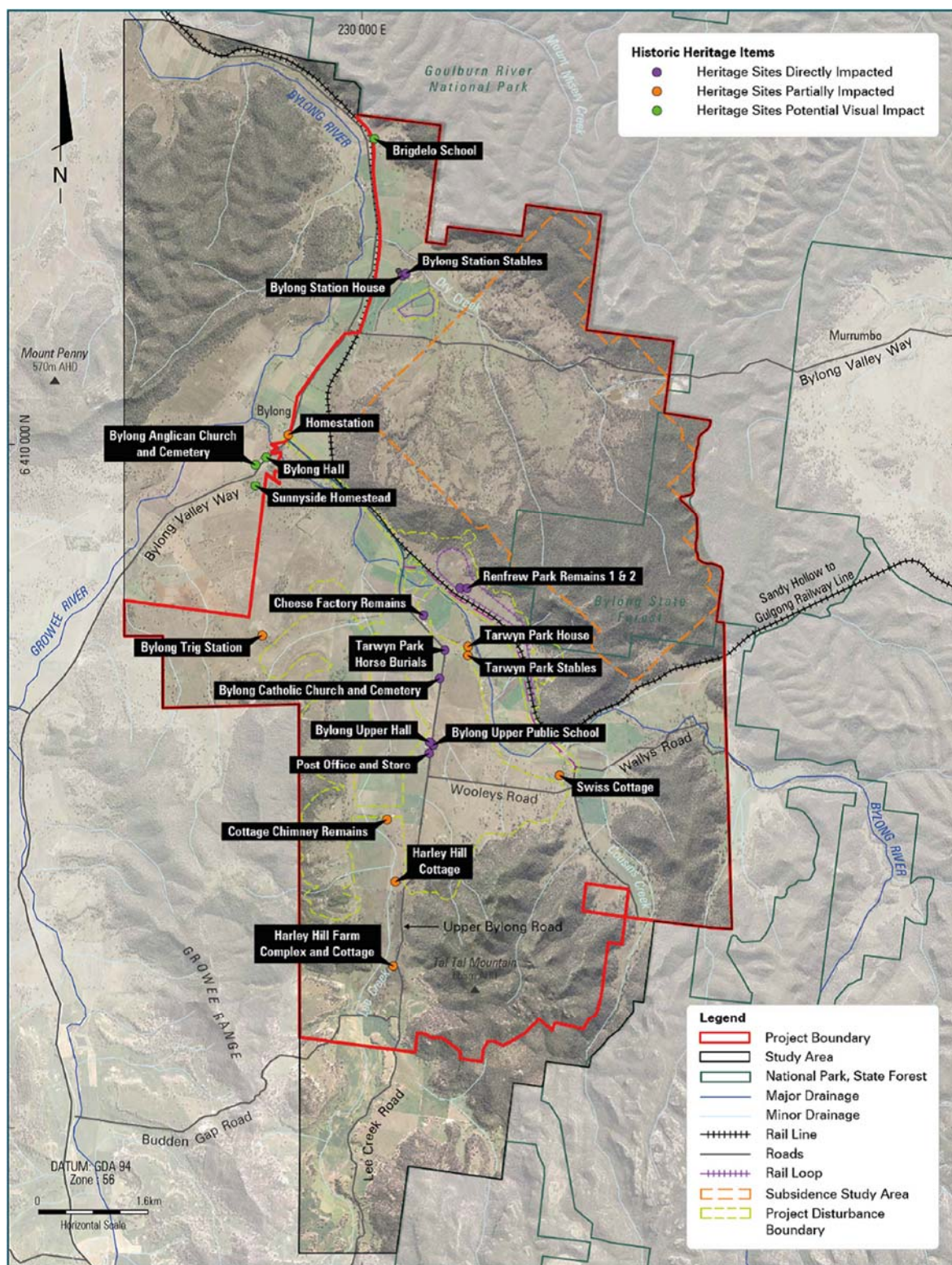


Table 6-4 – Historic Heritage Sites

Site Name	Potential Impact
Bylong Upper Public School (2 buildings)	Direct impact – in disturbance area
Cheese Factory Remains	Direct impact – in disturbance area
Our Lady of the Sacred Heart Catholic Church and Cemetery* (including 4 marked graves)	Direct impact – in disturbance area
Renfrew Park Remains 1 & 2 (homestead)	Direct impact – in disturbance area
Upper Bylong Post Office and Store	Direct impact – in disturbance area
Bylong Upper Hall	Direct impact – in disturbance area
Homestation (homestead)	Partial impact – visual
Bylong Station Farm Complex	Partial impact – visual, some direct impact to farmland
Sunnyside (homestead)	Partial impact – visual
Bylong St Stephens Anglican Church and Cemetery* (including 44 graves)	Partial impact – visual
Harley Hill Farm Complex and Cottage	Partial impact – visual, vibration
Bylong Trig Station	Partial impact – visual
Swiss Cottage (homestead)	Partial impact – visual, vibration
Bylong Hall	Partial impact – visual
Tarwyn Park Farm Complex	Partial impact – visual, vibration, some direct impact to farmland and horse burial location
Cottage Chimney Ruins	Partial impact – visual
Bylong Valley Cultural Landscape (reflecting the aesthetic and cultural values of the Bylong Valley)	Partial impact – visual, direct impact to farmland, landscape features and heritage items
Bylong Landscape Conservation Area* (including the Bylong and neighbouring valleys covering approximately 486km ²)	Partial impact – visual, direct impact to farmland, landscape features and heritage items

* Listed on the National Trust Register

APPENDIX 7 - FINAL LANDFORM AND LANDUSE

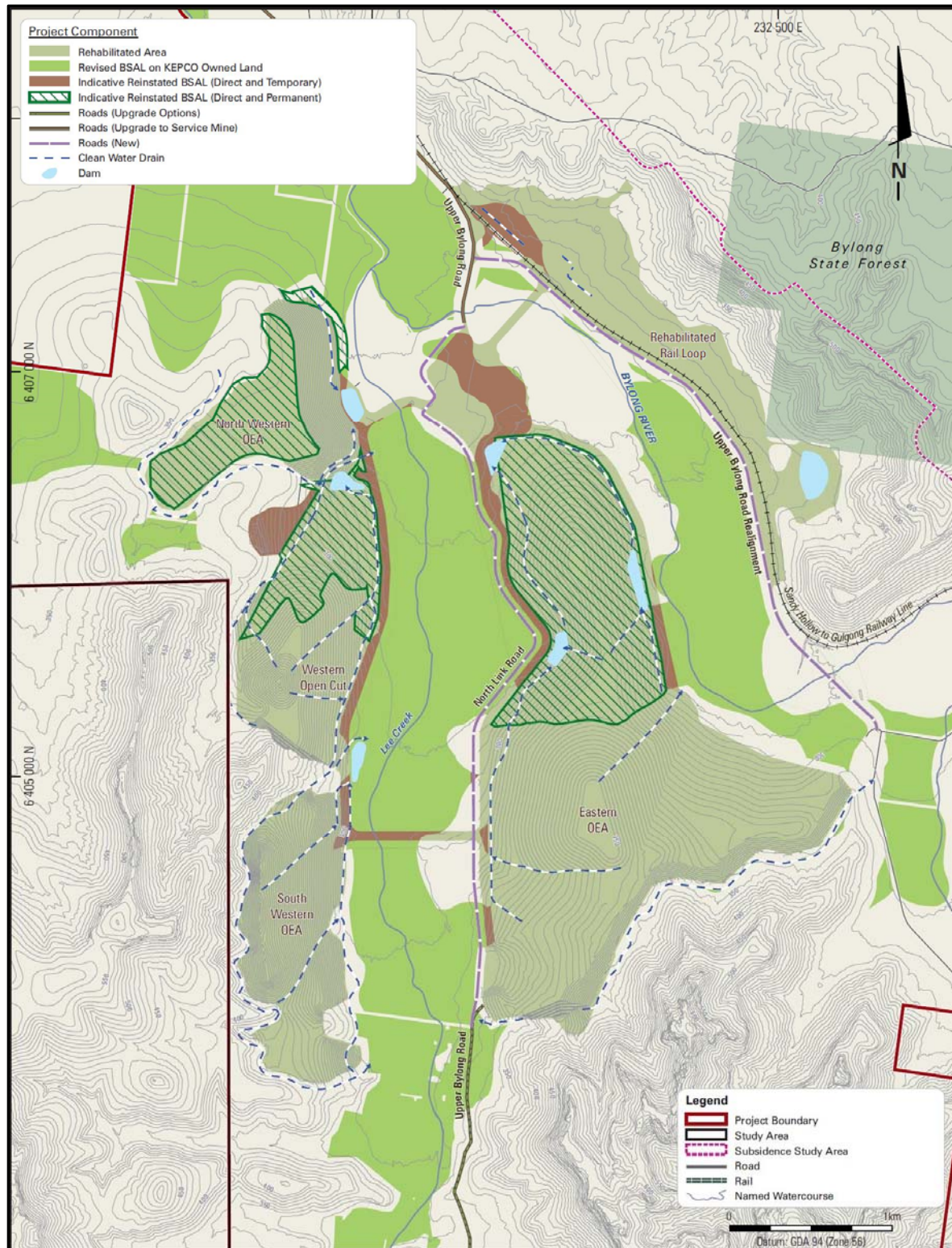


Figure 7.1: Final Landform and Re-instated BSAL

APPENDIX 8 - TERMS OF EXECUTED VPA

Extract from Executed Planning Agreement (Minter Ellison Ref 1088204)

2. Planning Agreement under the Act

The Parties agree that this Agreement is a Planning Agreement governed by Subdivision 2 of Division 6 of Part 4 of the Act.

3. Application of this Agreement

This agreement applies to the Land and the Development.

4. Operation of this Agreement

This Agreement operates if:

- (a) Development Consent is granted by the Consent Authority for the Development on the Land and the Other Land; and
- (b) the Agreement is entered into as required by clause 25C(1) of the Regulation.

5. Development Contributions

- (a) Subject to this Agreement, the Developer is to make the following Development Contributions in respect of the Development:
 - (i) payment of \$1.5 million to the Council on the granting of the Development Consent by the Consent Authority for the Development on the Land and the Other Land which is payable on the date that the Development is physically commenced;
 - (ii) payment of \$1.25 million to the Council on the Mine Commencement Date; and
 - (iii) payment of \$0.05 per tonne of Product Coal to the Council towards the Community Investment Fund, which is payable within three months of the end of each Financial Year for the Term.
- (b) The Parties acknowledge and agree that the amount of Development Contributions in:
 - (i) clause 5(a)(i) and 5(a)(ii) will increase annually from 1 July 2017 in accordance with CPI; and
 - (ii) clause 5(a)(iii) will increase annually at the start of each Financial Year following the initial payment following the end of the first Financial Year in accordance with CPI.