

## MOUNT PLEASANT OPTIMISATION PROJECT

**MACH**Energy

**Mount Pleasant Operation**

A JOINT VENTURE WITH

**JODA**  
Japan Coal Development Australia

## EXECUTIVE SUMMARY

The Mount Pleasant Operation is a major open cut coal mine and associated infrastructure, located approximately 3 kilometres north-west of Muswellbrook in the Upper Hunter Valley of New South Wales (NSW). The Mount Pleasant Operation is operated in accordance with Development Consent DA 92/97 and has an average operational workforce of 330 people.

MACH Mount Pleasant Operations Pty Ltd is the manager of the Mount Pleasant Operation as agent for, and on behalf of, the unincorporated Mount Pleasant Joint Venture between MACH Energy Australia Pty Ltd (95 per cent [%] owner) and J.C.D. Australia Pty Ltd (5% owner).

### Overview of the Project

The Mount Pleasant Joint Venture is seeking development consent to optimise the Mount Pleasant Operation, including access to additional run-of-mine (ROM) coal reserves, and an extension to the approved life of the mine from 2026 to 2048, without significantly increasing the approved mine disturbance footprint. The proposal is herein referred to as the Mount Pleasant Optimisation Project (the Project).

The Project open cut operations would remain within Mining Leases obtained in support of the approved Mount Pleasant Operation. The Project would facilitate a staged increase in the rate of ROM coal extraction to 21 million tonnes per annum and would be supported by the use and augmentation of existing and approved infrastructure at the Mount Pleasant Operation.

The Project would support the extraction of approximately 250 million tonnes of additional ROM coal by deepening part of the pit floor to access additional coal reserves, and increasing the rate and duration of mining.

If approved, the Project would produce the following benefits for the local area, NSW and the national economy:

- continuation of current operational employment and generation of approximately 300 additional jobs for the region, with many more expenditure-induced indirect jobs;
- continued support for regional business, including construction-related capital expenditure and substantial ongoing operating expenditure;

- State and Commonwealth corporate tax contributions;
- payment of significant coal royalties to the NSW Government over the life of the Project; and
- ongoing financial support for regional community groups.

### Purpose of this Document

This Scoping Report has been prepared to provide a description of the Project for key State regulatory agencies to initiate the preparation of the Secretary's Environmental Assessment Requirements in accordance with clause 3 of Schedule 2 of the NSW *Environmental Planning and Assessment Regulation, 2000*. The Secretary's Environmental Assessment Requirements will identify matters that will need to be addressed in the Project Environmental Impact Statement (EIS).

The Project will also be referred to the Commonwealth Minister for the Environment and Energy for consideration as to whether the Project meets the criteria of a 'Controlled Action' and requires approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999*.

Assessment of the key potential environmental issues in the EIS will include consideration of:

- the existing environment, using baseline data gathered over the life of the Mount Pleasant Operation;
- potential impacts of all stages of the Project, including relevant cumulative impacts;
- measures that could be implemented to avoid, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the Project; and
- contingency plans and/or adaptive management for managing any potentially significant residual risks to the environment.

Assessments for the EIS would consider applicable policies, guidelines and plans included in the *Indicative Secretary's Environmental Assessment Requirements for State Significant Mining Developments* (or its latest version).

Development Consent for the Project would be sought under the State Significant Development provisions (i.e. Division 4.7) under Part 4 of the NSW *Environmental Planning and Assessment Act, 1979* from the NSW Minister for Planning or the Independent Planning Commission.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY	ES-1
1 INTRODUCTION	1
1.1 BACKGROUND	1
1.2 PURPOSE OF THIS DOCUMENT	1
1.3 STRUCTURE OF THIS DOCUMENT	4
1.4 PROJECT OVERVIEW	4
2 PROPONENT DETAILS	5
3 PROJECT DETAILS	5
3.1 TARGET RESOURCE	5
3.2 LOCAL AND REGIONAL CONTEXT	11
3.3 PROJECT DESCRIPTION	12
3.4 MANAGEMENT STRATEGIES	16
3.5 PROJECT SCHEDULE	16
3.6 RELATIONSHIP WITH OTHER DEVELOPMENTS	16
3.7 PROJECT RATIONALE AND ALTERNATIVES CONSIDERED	16
4 STRATEGIC AND STATUTORY CONTEXT	17
4.1 COMPATIBILITY WITH EXISTING AND FUTURE LAND USES	17
4.2 PERMISSIBILITY AND STRATEGIC PLANNING	18
4.3 OTHER APPROVALS AND LICENCES	21
5 ENGAGEMENT DURING PROJECT SCOPING	23
6 MATTERS AND IMPACTS	25
6.1 OVERVIEW	25
6.2 KEY ISSUES AND OTHER ISSUES FOR INCLUSION IN THE ENVIRONMENTAL IMPACT STATEMENT	25
6.3 CUMULATIVE IMPACT ASSESSMENT	31
7 PROPOSED ENGAGEMENT	31
7.1 PROJECT COMMUNITY AND STAKEHOLDER ENGAGEMENT PROGRAM	31
8 CONCLUSION	32
9 REFERENCES	33

## LIST OF ATTACHMENTS

Attachment A	Provisional Development Application Area and Preliminary Schedule of Lands
Attachment B	Key Outputs of the Scoping Worksheet
Attachment C	Social Impact Assessment Scoping Report

## LIST OF TABLES

Table 1	Relevant MACH Mining Tenements
Table 2	Summary of the Approved Mount Pleasant Operation and the Project
Table 3	Provisional Annual Project ROM Coal Production Rates
Table 4	Key Potential Environmental Issues, Proposed Assessment and Preliminary Strategies

## LIST OF FIGURES

Figure 1	Regional Location
Figure 2	Project Location
Figure 3	General Arrangement of the Approved Mount Pleasant Operation
Figure 4	General Arrangement of the Project
Figure 5	Land Ownership Overview
Figure 6	Geology of the Mount Pleasant Operation and Surrounds
Figure 7	Indicative Stratigraphy of the Mount Pleasant Operation
Figure 8	Regional Biophysical Strategic Agricultural Land and Critical Industry Cluster Mapping

## LIST OF PLATES

Plate 1	Mount Pleasant Operation Coal Handling and Preparation Plant
Plate 2	Mount Pleasant Operation Open Cut
Plate 3	Mount Pleasant Operation Train Load-out Facility
Plate 4	Environmental Surveys Adjacent to Mining Lease 1645
Plate 5	Public Road Network in the Vicinity of the Mount Pleasant Operation
Plate 6	Mount Pleasant Operation Community Consultative Committee
Plate 7	Bridge Street Muswellbrook
Plate 8	Example Mount Pleasant Operation Personnel



## 1 INTRODUCTION

### 1.1 BACKGROUND

The Mount Pleasant Operation is a major operating open cut coal mine and associated infrastructure, located approximately 3 kilometres (km) north-west of Muswellbrook in the Upper Hunter Valley of New South Wales (NSW) (Figures 1 and 2).

MACH Mount Pleasant Operations Pty Ltd (ACN 625 627 723) is the manager of the Mount Pleasant Operation as agent for, and on behalf of, the unincorporated Mount Pleasant Joint Venture between MACH Energy Australia Pty Ltd (MACH Energy) (95 per cent [%] owner) and J.C.D. Australia Pty Ltd (5% owner)<sup>1</sup>.

The Mount Pleasant Optimisation Project (the Project) proposes extraction of additional coal reserves within Mount Pleasant Operation Mining Leases (MLs) and an increase in the rate of coal extraction, without significantly increasing the total disturbance footprint. The extraction of additional Project coal reserves would be supported by the use and augmentation of existing and approved infrastructure at the Mount Pleasant Operation (Plate 1).

### 1.2 PURPOSE OF THIS DOCUMENT

This document has been prepared to provide a description of the Project to key State regulatory agencies to initiate the preparation of the Secretary's Environmental Assessment Requirements (SEARs) in accordance with clause 3 of Schedule 2 of the NSW *Environmental Planning and Assessment Regulation, 2000* (EP&A Regulation).

The SEARs will identify matters that will need to be addressed in the Environmental Impact Statement (EIS) for the Project.

The Project will also be referred to the Commonwealth Minister for the Environment and Energy for consideration as to whether the Project meets the criteria of a 'Controlled Action' and requires approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act).

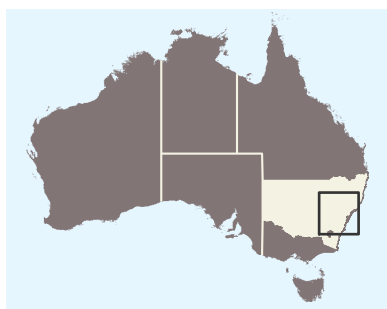
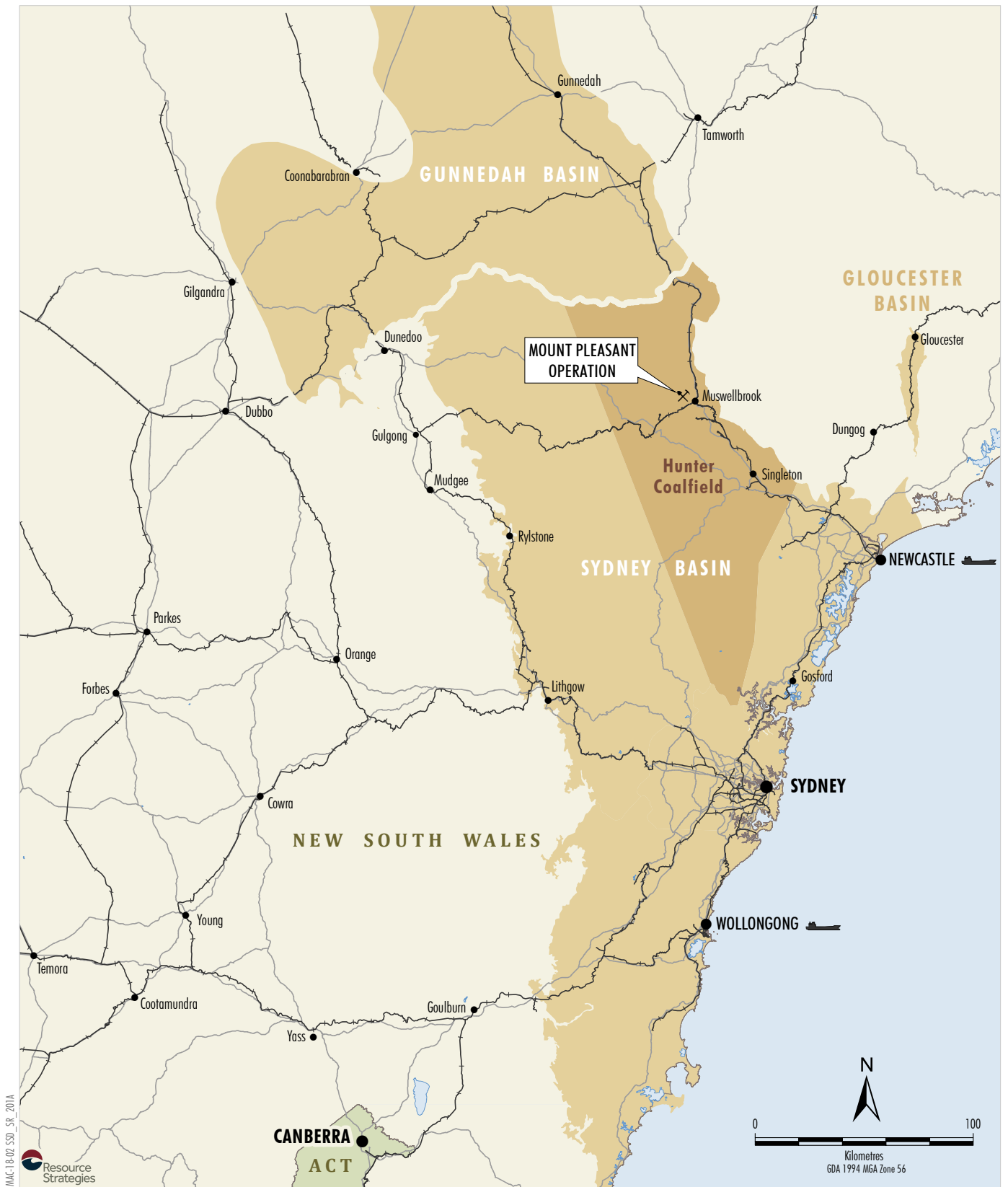
The SEARs will be prepared by the NSW Department of Planning, Industry and Environment (DPIE) in consideration of:

- this document;
- key issues raised by relevant regulatory agencies and feedback from the community during initial engagement;
- *Indicative Secretary's Environmental Assessment Requirements - For state significant mining developments* (NSW Government, 2015a);
- the decision of the Commonwealth Minister for the Environment and Energy regarding the referral of the relevant 'Action' under the EPBC Act; and
- applicable guidelines and statutory considerations.



**Plate 1**  
**Mount Pleasant Operation Coal Handling and Preparation Plant**

<sup>1</sup> Throughout this Scoping Report, MACH Mount Pleasant Operations Pty Ltd and the unincorporated Mount Pleasant Joint Venture will be referred to as MACH.



**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Regional Location

**Figure 1**





### 1.3 STRUCTURE OF THIS DOCUMENT

This document has been prepared in consideration of the *Mine Application Guideline* (NSW Government, 2015b), the Draft *Scoping an Environmental Impact Statement* guideline (NSW Government, 2017a) and Draft *Preparing a Scoping Report* guideline (NSW Government, 2019).

The document is structured as follows:

Section 1	Introduction – provides a summary of the Project and describes the purpose and structure of this Scoping Report.
Section 2	Proponent Details – identifies the Project proponent.
Section 3	Project Details – describes the context of the Project, provides a description and rationale for the Project.
Section 4	Strategic and Statutory Context – describes how the Project relates to existing land uses in the area, outlines the permissibility of the Project and identifies potentially relevant statutory planning instruments and strategic planning documents.
Section 5	Engagement During Project Scoping – outlines consultation with relevant stakeholders that has already been undertaken for the Project.
Section 6	Matter and Impacts – identifies key environmental issues of particular relevance to the Project, outlines the proposed level and scope of environmental assessment, and identifies strategies to address the impacts identified.
Section 7	Proposed Engagement – outlines consultation with relevant stakeholders proposed to be carried out for the Project.
Section 8	Conclusion – provides a summary of what is proposed to be included in the EIS.
Section 9	References.

### 1.4 PROJECT OVERVIEW

The Project is being proposed as it would optimise the Mount Pleasant Operation, providing for the extraction of additional coal within MLs obtained in support of the approved Mount Pleasant Operation without significantly increasing the mine disturbance footprint. This would be supported by the use and augmentation of existing Mount Pleasant Operation infrastructure.

The Project would support the extraction of approximately 250 million tonnes (Mt) more run-of-mine (ROM) coal than currently approved to be extracted under Development Consent DA 92/97 (approximately 197 Mt). The Project would include the following activities:

- increased open cut extraction within Mount Pleasant Operation MLs by mining of additional coal reserves, including lower coal seams in North Pit;
- a staged increase in extraction, handling and processing of ROM coal up to 21 million tonnes per annum (Mtpa) (i.e. progressive increase in ROM coal mining rate from 10.5 Mtpa over the Project life);
- staged upgrades to the existing Coal Handling and Preparation Plant (CHPP) and coal handling infrastructure to facilitate the handling and processing of additional coal;
- rail transport of up to approximately 17 Mtpa of product coal to domestic and export customers;
- upgrades to workshops, electricity distribution and other ancillary infrastructure;
- relocation of existing infrastructure to facilitate mining (e.g. Castlerock Road, powerlines and water pipelines);
- construction and operation of new water management and water storage infrastructure in support of the mine;
- CHPP reject dewatering facilities to allow co-disposal of fine rejects with waste rock as part of ROM waste rock operations;
- development of an integrated waste rock emplacement landform that incorporates geomorphic drainage design principles for hydrological stability, and varying topographic relief to be more natural in exterior appearance;
- construction and operation of new ancillary infrastructure in support of mining;
- extension to the time limit on mining operations to 22 December 2048;

- an average operational workforce of approximately 615 people, with a peak operational workforce of approximately 840 people;
- additional deliveries of equipment and consumables and additional workforce movements on the public road network;
- ongoing exploration activities; and
- other associated infrastructure, plant, equipment and activities.

General arrangements of the approved Mount Pleasant Operation and the Project are provided on Figures 3 and 4, respectively. Land ownership in the vicinity of the Mount Pleasant Operation is provided on Figure 5.

Should Development Consent be granted for the Project (which incorporates and extends upon the approved Mount Pleasant Operation), subject to the proponent being satisfied with the consent conditions, Development Consent DA 92/97 would be surrendered so that the Project would operate under the new consent only.

## 2 PROPONENT DETAILS

MACH Energy Australia Pty Ltd (ABN 34 608 495 411) and J.C.D. Australia Pty Ltd (ABN 49 002 017 209) are the applicants for the Project. The contact details for MACH Mount Pleasant Operations Pty Ltd, as agent for and on behalf of both applicants, are<sup>2</sup>:

MACH Mount Pleasant Operations Pty Ltd  
Suite 1, Level 3  
426 King Street  
NEWCASTLE NSW 2302  
Phone: 1800 931 873

The MACH website is:

<https://machenergyaustralia.com.au/>

The Mount Pleasant Operation is located at Wybong Road, Muswellbrook NSW 2333.

The Mount Pleasant Operation External Relations Manager is:

Ngaire Baker  
Phone: (02) 5517 1100  
Email: [info@machenergyaustralia.com.au](mailto:info@machenergyaustralia.com.au)

## 3 PROJECT DETAILS

### 3.1 TARGET RESOURCE

#### *Mining and Exploration Tenements*

The Project proposes extraction of additional coal reserves within MLs obtained in support of the approved Mount Pleasant Operation.

Table 1 provides details of relevant mining tenements currently held by MACH.

**Table 1**  
**Relevant MACH Mining Tenements**

Tenement Reference	Expiry
ML 1645	17/12/2031
ML 1708	02/02/2036
ML 1709	02/02/2036
ML 1713	02/02/2036
ML 1750	03/03/2038

#### *Geology*

The Project is located within the Hunter Coalfield, in the northern section of the Sydney Basin (Figure 1).

The Project coal resource is located in the Permian Wittingham Coal Measures within the Denman Formation and Jerrys Plains Subgroup and the Archerfield Sandstone and Vane Subgroup (Figure 6).

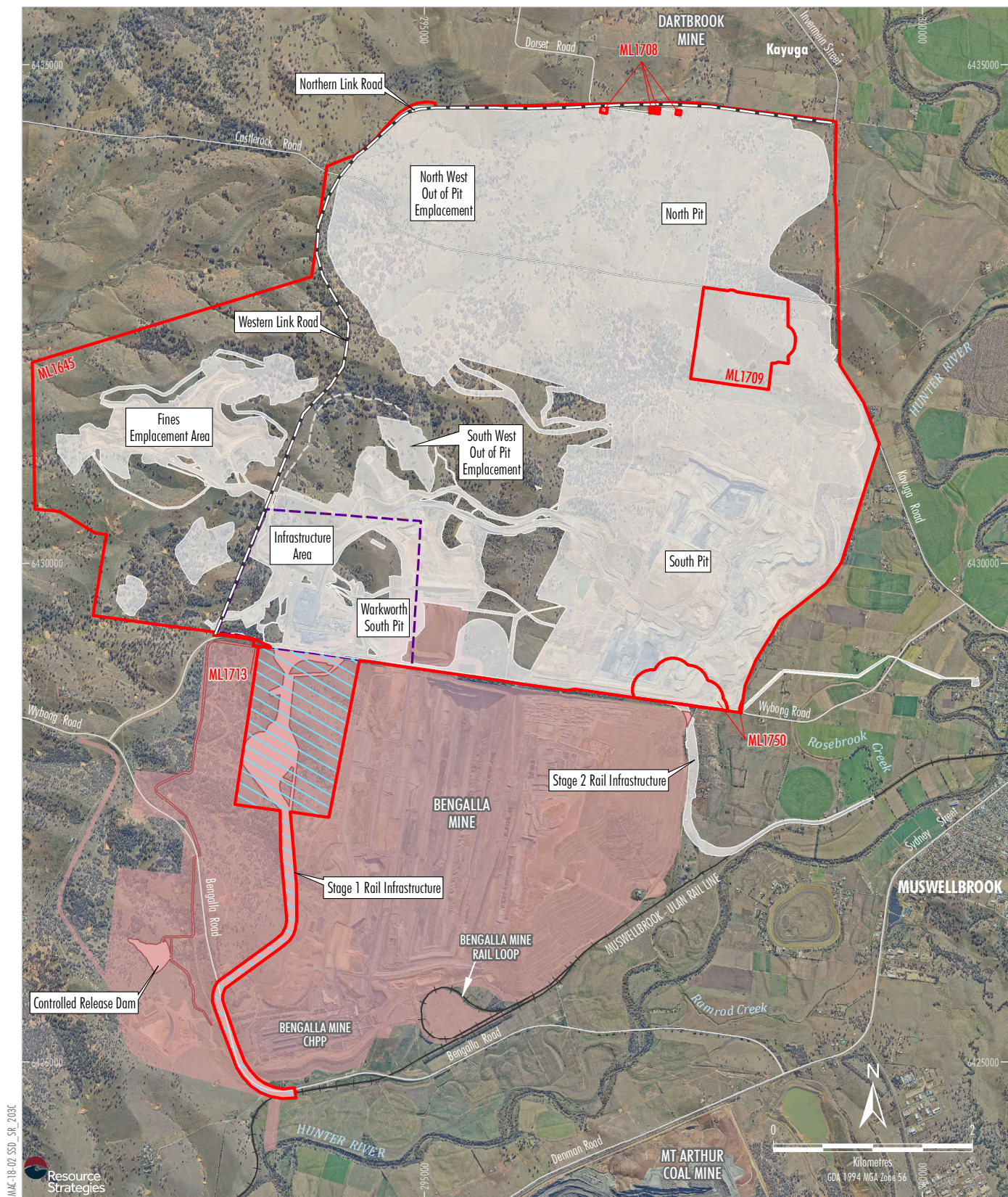
Lithologies comprise mostly sandstones, siltstones and coal seams with minor conglomerates and tuffs. Coal seams amenable to open cut mining occur in eight correlated seams and include the Upper Piercefield (Warkworth) Seam to the lowermost Edderton Seam.

Open cut mining for the Project would target all eight seams (i.e. the Warkworth, Mount Arthur, Piercefield, Vaux, Broonie, Bayswater, Wynn and Edderton Seams) in South Pit, Central Pit and North Pit. Figure 7 presents the indicative stratigraphy of the Project mining areas, including these target seams.

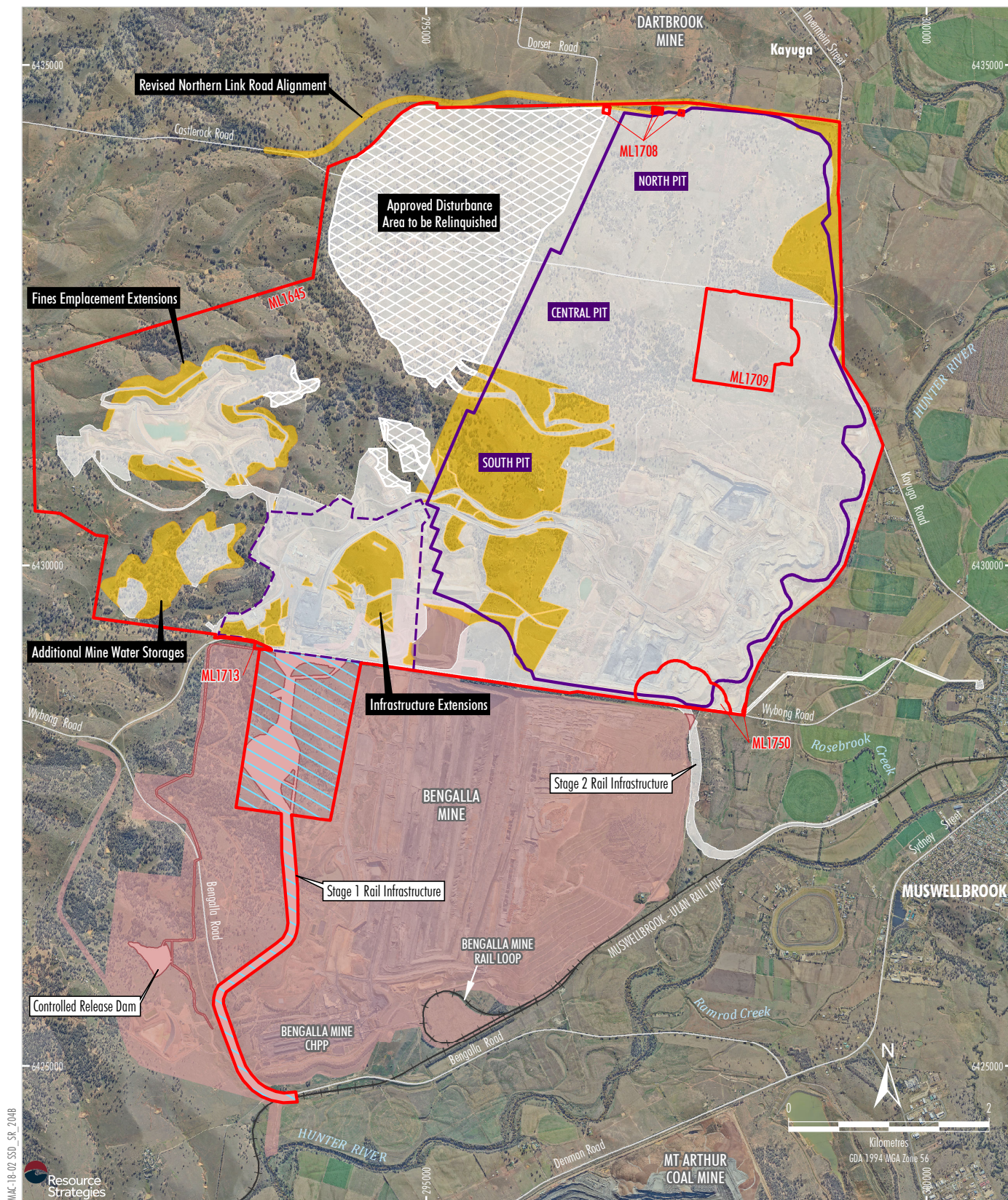
The target coal seams vary widely across the extent of the mine, with mineable units generally ranging from approximately 0.6 metres (m) to approximately 10 m in thickness.

<sup>2</sup> MACH Mount Pleasant Operations Pty Ltd is the manager of the Mount Pleasant Operation as agent for and on behalf of the unincorporated Mount Pleasant Joint Venture between MACH Energy (95% owner) and J.C.D. Australia Pty Ltd (5% owner).









#### LEGEND

##### Existing Mine Elements

- Mining Lease Boundary
- Approximate Extent of Existing/Approved Surface Development (DA92/97) <sup>1</sup>
- Revised Infrastructure Area Envelope
- Infrastructure to be removed under the Terms of Condition 37, Schedule 3 (DA92/97)

- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170)

##### Additional/Revised Project Elements

- Approved Disturbance Area to be Relinquished
- Approximate Additional Disturbance of Project Extensions <sup>1</sup>
- Approximate Extent of Project Open Cut and Waste Rock Emplacement Landforms

#### NOTE

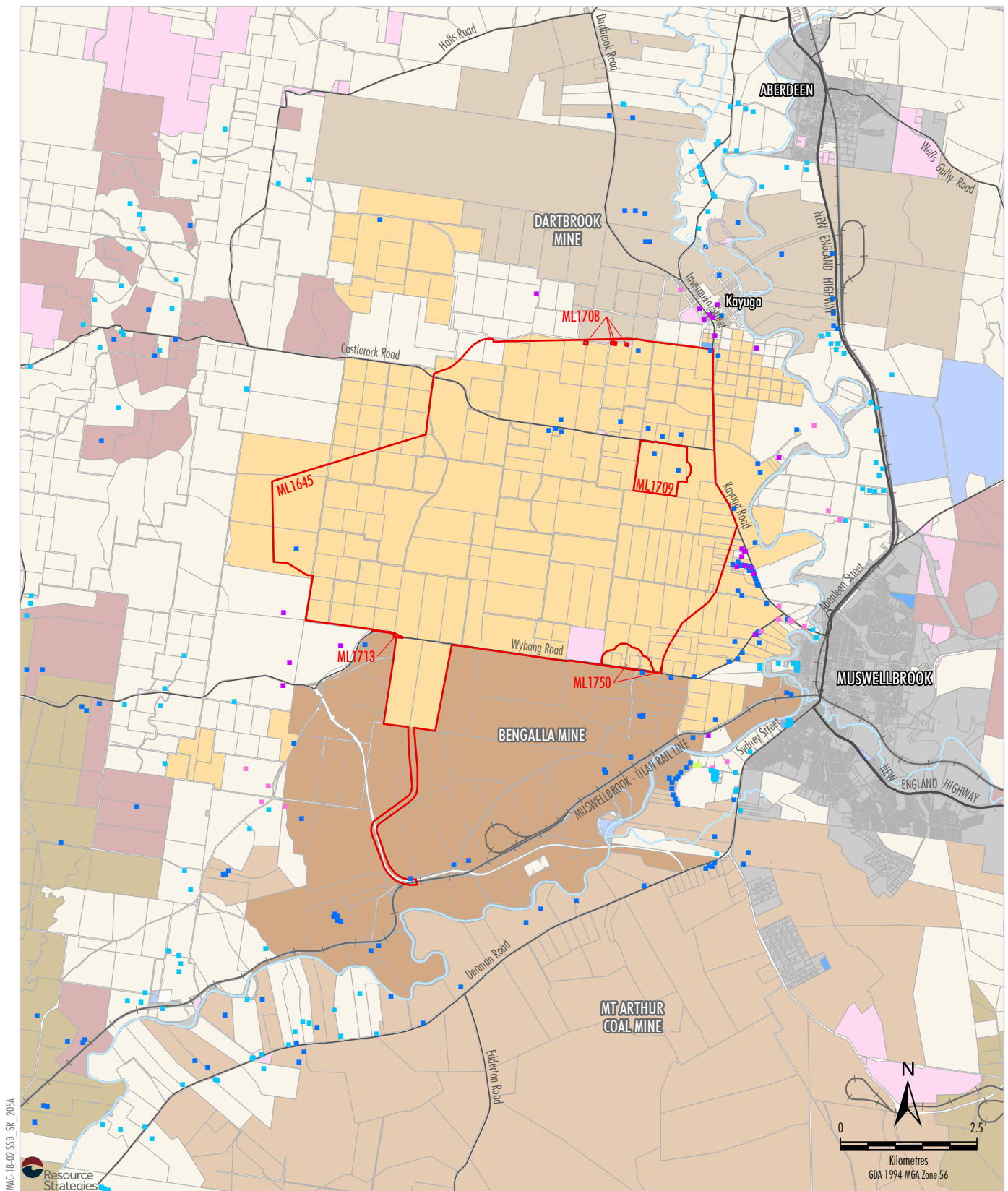
1. Excludes some incidental Project components such as water management infrastructure, road diversions, access tracks, topsoil stockpiles, power supply, temporary offices, signalling, other ancillary works and construction disturbance.

Source: MACH Energy (2019); NSW Spatial Services (2019); Department of Planning, Industry and Environment (2016)  
Orthophoto: MACH Energy (June 2019)

**MACHEnergy**  
MOUNT PLEASANT OPTIMISATION PROJECT  
General Arrangement of the Project

**Figure 4**





#### LEGEND

- Mining Lease Boundary
- Mount Pleasant Controlled
- Bengalla Controlled
- Dartbrook Controlled
- Mt Arthur Controlled
- Muswellbrook Coal Controlled
- Other Mining/Resource Controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEPs Zones B2, B5, IN1, SP2, R2, R5, RE1, RE2 and W1

- Mine-owned Dwelling
- Privately-owned Residence - MPO Acquisition on Request
- Privately-owned Residence - MPO Mitigation/Acquisition on Request \*
- Privately-owned Residence - MPO Mitigation on Request
- Other Privately-owned Residence

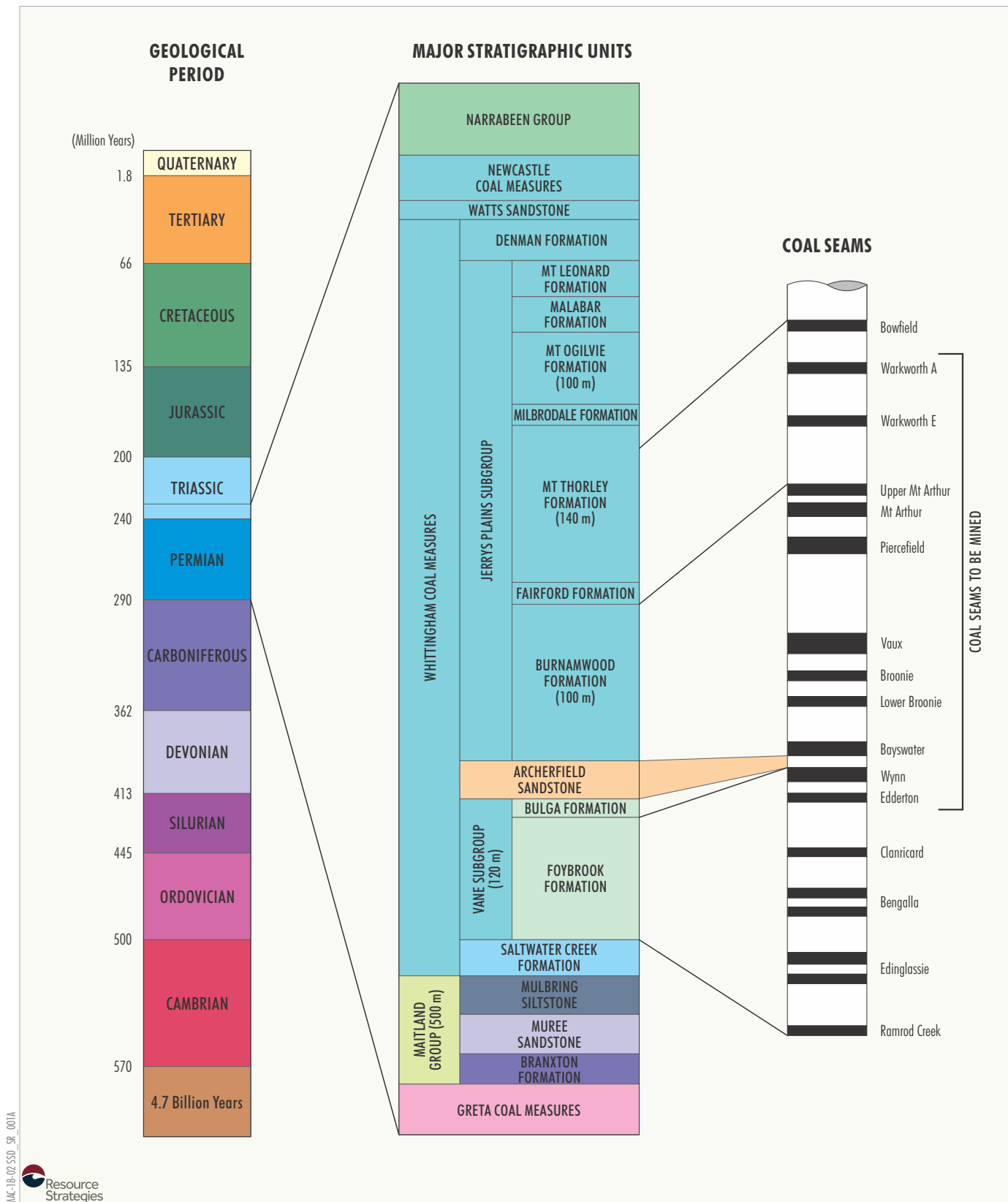
\* MPO Mitigation on Request - rail noise. MPO is only required to acquire and/or install air quality mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.

Source: MACH Energy (2019); NSW Spatial Services (2019)

**MACHEnergy**  
MOUNT PLEASANT OPTIMISATION PROJECT  
Land Ownership Overview

Figure 5





Source: MACH Energy (2017)



### Exploration Methods

Exploration within the Project mining areas has been conducted since the 1990s, with over 700 exploration boreholes completed to date. A number of radar and magnetometer surveys have also been conducted to characterise the geological features at the Mount Pleasant Operation.

Geological exploration activities would continue to be undertaken over the life of the Project to provide input to mine planning and engineering studies to refine the understanding of coal quality and local geological structures.

### Coal Resource

The total proved and probable coal reserves at the Mount Pleasant Operation are approximately 623 Mt of ROM coal.

The Project would recover approximately 412 Mt of ROM coal from the target coal seams. In total, the Mount Pleasant Operation incorporating the Project would recover approximately 447 Mt of ROM coal.

## 3.2 LOCAL AND REGIONAL CONTEXT

The Project is located approximately 3 km north-west of Muswellbrook in the Upper Hunter Valley of NSW (Figures 1 and 2).

The provisional Project Development Application Area is located in the Muswellbrook Local Government Area. A preliminary Schedule of Lands for the provisional Development Application Area is provided in Attachment A.

MACH owns the freehold land within the Project open cut areas, and the majority of freehold land within MLs 1645, 1708, 1709, 1713 and 1750 (Figure 5).

The extension and continued use of the existing CHPP and other infrastructure associated with the approved Mount Pleasant Operation would largely remain within ML 1645 (Figure 4).

### Project Area

Landforms in the vicinity of the Mount Pleasant Operation are characterised by the broad floodplain of the Hunter River surrounded by the undulating foothills and ridges of the surrounding terrain, including more elevated areas within Muswellbrook. Elevations in the vicinity of the Mount Pleasant Operation range from approximately 360 metres Australian Height Datum (m AHD) at Mount Pleasant to approximately 140 m AHD at the existing Hunter River pump station.

The Project is located within a mining precinct with the Bengalla Mine located immediately to the south and Dartbrook Mine located immediately to the North (Figures 2 and 6). Land use other than mining in the vicinity of the Project includes grazing and other agricultural enterprises.

### Environmentally Sensitive Areas

A preliminary investigation of environmentally sensitive areas of State significance (as defined in the *State Environmental Planning Policy (State and Regional Development) 2011* [State and Regional Development SEPP]) with respect to the Project has identified the following:

- The provisional Development Application Area includes land mapped as 'Environmentally Sensitive Land' under the *Muswellbrook Local Environmental Plan 2009* (Muswellbrook LEP).
- The provisional Development Application Area is not within coastal waters of the State.
- No lands identified as 'coastal wetlands' or 'littoral rainforest' within the meaning of *State Environmental Planning Policy (Coastal Management) 2018*, or reserved as an aquatic reserve under the *NSW Fisheries Management Act, 1994*, or as a marine park under the *NSW Marine Parks Act, 1997* occur within the provisional Development Application Area.
- No lands within a wetland of international importance under the Ramsar Convention or lands within a World Heritage area under the World Heritage Convention occur in or near the provisional Development Application Area.
- No lands identified in an Environmental Planning Instrument as being of high Aboriginal cultural significance or high biodiversity value have been identified within the provisional Development Application Area.
- No lands reserved as a state conservation area under the *NSW National Parks and Wildlife Act, 1974*, or places, buildings or structures listed on the State Heritage Register under the *NSW Heritage Act, 1977* occur within the provisional Development Application Area.
- No lands declared as critical habitat under the *NSW Threatened Species Conservation Act, 1995* or *Fisheries Management Act, 1994* occur within the provisional Development Application Area.
- Crown land within the provisional Development Application Area is also currently within Development Consent DA 92/97, with the exception of some additional Crown Roads.

### 3.3 PROJECT DESCRIPTION

Table 2 provides a summary of the key characteristics of the Project.

#### 3.3.1 Project Development and Construction Activities

The Project would largely comprise continuation and intensification of open cut operations and the development of facilities and infrastructure in support of mining, including staged upgrades to the CHPP.

Construction activities would occur throughout the life of the Project; however, key construction periods would be Year 3 (Northern Link Road development), Years 4 and 5 (CHPP Stage 2a upgrade) and Years 10 and 11 (CHPP Stage 2b upgrade).

Development of additional water management infrastructure would also occur progressively over the life of the Project.

Construction activities located within the Mount Pleasant Operation mining leases may be undertaken up to 24 hours per day, 7 days per week. Development of the Northern Link Road would generally be limited to 7.00 am to 6.00 pm Monday to Sunday.

#### **Staged Upgrades to the Existing Coal Handling and Preparation Plant**

The existing Mount Pleasant Operation CHPP and coal handling infrastructure would continue to be used for the Project. To facilitate the handling and processing of additional coal, the following upgrades would be implemented (hereafter referred to as the Stage 2 CHPP components):

- the two existing Coal Preparation Plant modules would be augmented, with one additional module constructed in approximately Years 4 and 5 and the second additional module constructed in approximately Years 10 and 11;
- the existing ROM hopper would be augmented by constructing at least one additional ROM hopper;
- CHPP fine reject dewatering facilities would be constructed;
- additional product stockpiles would be developed; and
- the main ROM coal stockpile would be expanded.

While development of the Stage 2 CHPP components would generally be undertaken in two stages (i.e. to increase the mining rate to 15.75 Mtpa and then to increase the mining rate to 21 Mtpa), augmentations may be made to the CHPP over the life of the Project.

#### **Development of the Northern Link Road**

The approved Mount Pleasant Operation includes the closure of a section of Castlerock Road and development of the Northern Link Road to connect Dorset Road and Castlerock Road, to the west of the Mount Pleasant Operation mining leases (Figure 3).

The alignment of the Northern Link Road would be revised for the Project to improve the intersection between the Northern Link Road and Castlerock Road (Figure 4).

#### **Development of Key Additional Water Management Infrastructure**

Additional water storages would be developed west of the Infrastructure Area Envelope (Figure 4) to support the existing Mine Water Dam (MWD) and provide additional water storage capacity for the Project.

#### **Other Construction Activities**

Other construction activities undertaken progressively over the life of the Project would include:

- progressive development and augmentation of dams, pumps, up-catchment diversions, pipelines, drains, storages and other water management equipment and structures;
- progressive development of haul roads, light vehicle access roads and services;
- progressive expansion of the mine infrastructure area (MIA) (e.g. expansion of existing workshops and fuel storage capacity);
- relocation of public infrastructure and services;
- construction of ancillary infrastructure (e.g. electricity distribution infrastructure, internal roads, potable water supply, sewage treatment facilities, site communications, remote crib huts, go-lines and security);
- replacement and/or upgrades to open cut mining and coal handling and processing machinery; and
- installation or replacement of environmental monitoring equipment.

**Table 2**  
**Summary of the Approved Mount Pleasant Operation and the Project**

Component	Approved Mount Pleasant Operation DA 92/97	Project
Mine Life	Originally 21 years from the date of grant of Development Consent DA 92/97 (i.e. from 22 December 1999 until 22 December 2020). Extended to 22 December 2026 in 2018 (via Modification 3).	Until 22 December 2048 (i.e. extension of 22 years, allowing for 31 years of mining operations overall).
Mining Method	Open cut mining method incorporating truck and excavator and dragline operations (dragline not envisaged prior to 2026).	Open cut mining method comprising truck and excavator and/or dragline operations.
ROM Coal Production	ROM coal production at a rate of up to 10.5 Mtpa.	ROM coal production at a rate of up to 21 Mtpa.
Resource to be recovered	Approximately 197 Mt of ROM coal.	Approximately 447 Mt of ROM coal for the Mount Pleasant Operation incorporating the Project.
Waste Rock Production	Waste rock removal at a rate of up to approximately 53 million bank cubic metres (Mbcm) per annum.	Waste rock removal at a rate of up to approximately 88 Mbcm per annum.
Waste Emplacements	Waste rock emplaced both in-pit, and in four major out-of-pit emplacement areas.	One integrated waste rock emplacement landform comprising both in-pit and out-of-pit areas. Relinquishment of the North West Out-of-Pit Emplacement area.
Coal Beneficiation	Processing of ROM coal in the on-site CHPP.	Staged upgrades to the CHPP to allow the handling and processing of additional ROM coal.
Coal Transport	Coal transported along the Muswellbrook–Ulan Rail Line and then the Main Northern Railway to the Port of Newcastle for export, or to domestic customers.	Unchanged.
	An average of three and a maximum of nine laden trains per day leaving the mine.	An approximate doubling of product coal movements at peak coal production.
Coal Rejects	Coarse rejects are placed within mined out voids and out-of-pit emplacements, and used to build walls of the Fines Emplacement Area. Fine rejects are stored in the Fines Emplacement Area.	As approved, plus fine reject dewatering infrastructure would also be installed on new Coal Processing Plant modules so dewatered fine rejects can be co-disposed with coarse rejects.
Water Supply and Disposal	Water requirements are met from dewatering the open cut mining areas, recycling water from the Fines Emplacement Area, from licensed extraction from the Hunter River, and use of excess water from the Bengalla or Dartbrook Mines.  Surplus water will be discharged into the Hunter River (or its tributaries) in compliance with the Hunter River Salinity Trading Scheme (HRSTS) and Environment Protection Licence (EPL) 20850.	Unchanged.  Site make-up water demand would increase in line with coal production.
		Unchanged.
Final Landform and Land Use	A final landform incorporating macro-relief and micro-relief concepts, so it does not look “engineered” from Muswellbrook, closely matches underlying topography and avoids major engineered drop structures where practical.  One final void would remain if mining was to cease in 2026. The full 21 year mine life indicative final landform includes two final voids associated with the North Pit and South Pit open cuts and a smaller third final void located in a low-lying area between the two larger final voids.	Development of an integrated waste rock emplacement landform that incorporates geomorphic drainage design principles for hydrological stability, and varying topographic relief to be more natural in exterior appearance.  One final void would remain.
	Rehabilitation with a mixture of pasture and forest, with increased revegetation with native tree species on the eastern face of the final landform.	Unchanged.
Hours of Operation	Operations are approved to be undertaken 24 hours per day, seven days per week.	Unchanged.
Operational Workforce	Average operational workforce throughout the life of the mine of approximately 330 people, and an estimated peak of approximately 380 people.	An average workforce of approximately 615 people, with a peak of approximately 840 full-time equivalent operational personnel (MACH staff and on-site contractor personnel).
Construction Workforce	Construction workforce is expected to peak at approximately 350 people.	Construction workforce may have short-term peaks of up to 500 people.

### 3.3.2 Open Cut Mining Operations

Open cut mining activities (Plate 2) and associated mobile equipment movements would continue to be undertaken 24 hours per day, seven days per week, subject to compliance with relevant environmental management criteria (e.g. real-time air quality and noise operational trigger levels).

The open cuts for the Project would comprise three largely contiguous named open cuts (South Pit, Central Pit and North Pit) (Figure 4). The eight target coal seams described in Section 3.1 would be recovered in each pit.

An indicative ROM coal production schedule for the Mount Pleasant Operation incorporating the Project is provided in Table 3 and illustrates the proposed staging of coal production for the Project.

**Table 3**  
**Provisional Annual Project ROM Coal Production Rates**

Project Year	Annual ROM Coal (Mtpa)
1 <sup>1</sup> to 5	10.5
6 to 11	15.8
12 to 26	Up to 21.0

<sup>1</sup> Assumed Project Year 1 is 2023.

The proposed staging of Project increases in coal production would provide sufficient time to establish the Eastern Out-of-Pit Emplacement and allow the focus of mining to move westwards (i.e. away from Muswellbrook), prior to peak production occurring. This staging would also spread additional workforce demand over an extended period.

### 3.3.3 Waste Rock Management

Waste rock (including overburden and interburden) mined during the development of the Project would continue to be hauled either out-of-pit (i.e. to the Eastern Out-of-Pit Emplacement) or progressively placed in the mine voids once the coal has been mined.

Overburden material would also be placed along selected boundary areas of the open cuts (e.g. the northern boundary of North Pit) in advance of mining activities to act as a safety bund (i.e. to prevent accidental access), and assist in reducing direct views of the open cut workings from publicly accessible locations and/or to act as a noise bund.

### 3.3.4 Coal Processing, Handling and Transport

The existing Stage 1 coal handling and processing infrastructure would be augmented in Stages 2a and 2b to accommodate the corresponding planned increases in the Project coal extraction rate in Years 5 and 11 (Table 3).

ROM coal would continue to be beneficiated through either the existing Stage 1 or additional Stage 2 Coal Preparation Plant modules, or bypassed directly to the product coal stockpiles.

Product coal produced from the CHPP and bypass coal would continue to be stockpiled prior to being reclaimed and loaded to trains at the approved Stage 2 rail load-out facility.

Product coal would continue to be loaded onto trains 24 hours per day, seven days per week (Plate 3). Product coal would be transported on the Muswellbrook-Ulan Rail Line to the Port of Newcastle for export, or to domestic customers for use in power generation.



**Plate 2**  
**Mount Pleasant Operation Open Cut**



As a component of the Project, the increase in transport of product coal from approximately 8.5 Mtpa to up to 17 Mtpa would require a corresponding increase in the approved daily maximum and average train movements.

No changes to the existing rail transport routes are proposed for the Project.



**Plate 3**  
**Mount Pleasant Operation Train Load-out Facility**

### 3.3.5 Coal Reject Management

Coarse reject material would continue to be hauled from the CHPP to the Eastern Out-of-Pit Emplacement or in-pit for disposal as a component of general ROM waste emplacement operations.

Fine reject material would continue to be pumped as a slurry and deposited in the Fines Emplacement Area, with excess water returned to the mine water management system for re-use on-site. Secondary flocculation of fine rejects would continue to occur in order to improve fine reject density at the Fines Emplacement Area.

The Fines Emplacement Area would be constructed progressively in a series of lifts throughout the life of the Project.

Following commissioning of the Stage 2 CHPP reject dewatering facilities, a portion of Project fine rejects would be dewatered and co-disposed with coarse rejects as part of ROM waste emplacement activities.

### 3.3.6 Infrastructure and Services

The existing infrastructure and services at the Mount Pleasant Operation, and infrastructure and services to be constructed in support of the approved mine (e.g. the Stage 2 rail infrastructure), would continue to be utilised throughout the life of the Project. The existing and approved infrastructure would be augmented with minor additions, upgrades and maintenance as required.

Development of the approved Northern Link Road (with a revised alignment) and expansion of the MIA to accommodate additional mobile equipment would be required in the initial stages of the Project.

As the approved Stage 2 rail infrastructure would be constructed adjacent to Wybong Road, the closure of Wybong Road to allow access to the underlying coal reserves would not form part of the Project. Therefore, the currently approved Western Link Road (Figure 3) would not form part of the Project.

### 3.3.7 Water Management

The existing water management system at the Mount Pleasant Operation would be progressively augmented as water management requirements change over the life of the Project.

The Project would include development of additional mine water storages west of the Infrastructure Area Envelope (Figure 4) to increase on-site storage capacity and replace the existing MWD that would ultimately be mined-through as part of the Project.

The majority of Mount Pleasant Operation make-up water supply requirements to date have been largely met by recycling water from the Fines Emplacement Area and from licensed extraction from the Hunter River. The installation of reject dewatering facilities for the Project is expected to increase on-site water recycling.

Consistent with the approved Mount Pleasant Operation, MACH may also source excess mine water from the adjoining mines (i.e. Dartbrook and Bengalla Mines) for use on-site, in order to reduce the make-up water demand from the Hunter River over the life of the Project, subject to obtaining all necessary secondary approvals.

### 3.3.8 Other Activities

Other activities that would be conducted as a component of the Project include environmental monitoring and minor associated infrastructure.



The Project would also include the continued rehabilitation of existing mining disturbance associated with the Mount Pleasant Operation, including the Eastern Out-of-Pit Emplacement. A detailed rehabilitation strategy for these areas will be presented in the Project EIS.

### 3.4 MANAGEMENT STRATEGIES

Preliminary strategies to address potential impacts associated with the Project are outlined in Section 6. These strategies would be developed and refined through the environmental assessment process and are expected to include both physical controls (e.g. bunding/cladding) and adaptive management measures (e.g. real-time monitoring and adaptive management of noise).

### 3.5 PROJECT SCHEDULE

It is anticipated that construction and operational activities associated with the Project would commence as soon as practicable after all necessary consents, approvals and licences for the Project have been obtained.

The Project would extend coal extraction at the approved Mount Pleasant Operation by approximately 22 years, providing for approximately 31 years of mining operations since commencement of mining activities in 2017.

### 3.6 RELATIONSHIP WITH OTHER DEVELOPMENTS

Should Development Consent be granted for the Project (which incorporates and extends upon the approved Mount Pleasant Operation), subject to the proponent being satisfied with the consent conditions, Development Consent DA 92/97 would be surrendered so that the Project would operate under the new consent only.

The Mount Pleasant Operation is located in a mining precinct between the Dartbrook and Bengalla Mines and in moderate proximity to the Mt Arthur, Muswellbrook and Mangoola Mines. Potential interactions with these mines (both direct and cumulative interactions) will be considered where relevant in the Project EIS. This will include consideration of potential water sharing opportunities (Section 3.7.3).

## 3.7 PROJECT RATIONALE AND ALTERNATIVES CONSIDERED

### 3.7.1 Project Rationale

The Project would optimise the extraction of coal reserves within the MLs obtained in support of the approved Mount Pleasant Operation (by deepening part of the pit floor and increasing the rate and duration of mining). The extraction of additional Project coal reserves would be supported by the use and augmentation of existing and approved infrastructure at the Mount Pleasant Operation.

MACH has elected to proceed with the Project as proposed due to:

- The location of additional coal reserves adjacent to and/or beneath the existing approved open cuts that would be recovered to provide a positive return on existing investments at the Mount Pleasant Operation.
- The recovery of the additional coal reserves and associated benefits to MACH, the Hunter Region and the State of NSW could be achieved without significantly increasing the approved mine disturbance footprint.
- Substantial capital savings associated with the continued use of existing Mount Pleasant Operation infrastructure and mobile equipment.
- Continuation of employment for Mount Pleasant Operation personnel.

The *Strategic Statement on NSW Coal* (NSW Government, 2014) recognises the value of coal production to the NSW economy, including:

- The long history of coal mining in NSW, and its close ties with communities in the Hunter.
- The potential for coal production to deliver significant economic benefits to local communities, including jobs and investment.
- Coal production's significant contribution to export earnings as the State's biggest single export earner.

The Project would produce the following benefits for the local area, NSW and for the national economy:

- continuation of current operational employment and generation of approximately 300 additional jobs for the region, with many more expenditure induced indirect jobs;

- continued support for regional business, including construction-related capital expenditure and substantial ongoing operating expenditure;
- State and Commonwealth corporate tax contributions;
- payment of significant coal royalties to the NSW Government over the life of the Project; and
- ongoing financial support for regional community groups.

Further consideration of the Project on social, environmental and economic grounds, including consideration of the principles of ecologically sustainable development, consideration of alternatives and a cost-benefit analysis, would be included in the EIS. This evaluation would consider the *Guidelines for the economic assessment of mining and coal seam gas proposals* (NSW Government, 2015c).

### 3.7.2 Alternatives Considered

A number of alternatives to the proposed Project have been considered by MACH to date and have not been adopted, including:

- expansion of the Project open cuts outside of the MLs obtained in support of the approved Mount Pleasant Operation (e.g. expanding mining activities across Kayuga Road into the exploration tenement held by MACH);
- closure of Wybong Road to access the underlying coal reserves, and associated development of the approved Northern Link Road and Western Link Road alignments (Figure 3); and
- mining the resources in the Project area in the most cost-efficient manner, resulting in multiple mining voids left in the final landform.

The above alternatives have not been adopted, as they had potential outcomes that were not aligned with MACH's objectives for the Project. Further discussion of these alternatives, and why they were not adopted for the Project will be included in the EIS.

### 3.7.3 Further Alternatives to be Considered

Further consideration of alternatives would be undertaken as a component of the EIS. This would include, but would not be limited to:

- measures to avoid, mitigate, rehabilitate and monitor the potential impacts of the Project;
- post-mining land uses of the rehabilitated Project final landform;
- extent, design features and future uses of the Project final void; and
- potential water management efficiency measures, water storage options and water sharing opportunities.

## 4 STRATEGIC AND STATUTORY CONTEXT

### 4.1 COMPATIBILITY WITH EXISTING AND FUTURE LAND USES

The Mount Pleasant Operation is located in the Muswellbrook Local Government Area between the Bengalla Mine immediately to the south, and the Dartbrook Mine located immediately to the north (Figure 2).

The *Upper Hunter Strategic Regional Land Use Plan* (NSW Government, 2012) collectively identified the Mount Pleasant, Dartbrook and Bengalla mining tenements as a largely contiguous area of 'existing mining title' on the relevant strategic regional land use map.

MACH commenced construction of the approved Mount Pleasant Operation in November 2016, and product coal transport from the site commenced in December 2018.

Land use in the vicinity of the Mount Pleasant Operation is characterised by a combination of approved coal mining operations, agricultural land uses and the commercial, industrial and residential areas of the towns of Muswellbrook and Aberdeen.

The Project would involve the continuation and extension of mining operations within the MLs obtained in support of the current approved Mount Pleasant Operation.

Therefore, consistent with the *Upper Hunter Strategic Regional Land Use Plan* (NSW Government, 2012), no Gateway Certificate under clause 17F of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (Mining SEPP) would be required for the Project.

The Project is permissible land use under NSW legislation (Section 4.2) and the EIS will include consideration of the potential impacts of the Project on other existing, approved or likely preferred land uses in the vicinity of the Project, including those associated with critical industry clusters mapped by the NSW Government (Figure 8).

## 4.2 PERMISSIBILITY AND STRATEGIC PLANNING

### ***Applicability of Part 4 of the Environmental Planning and Assessment Act, 1979***

Division 4.1 of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act) creates a threefold classification of development under the Act:

- development that may be carried out without development consent;
- development that may be carried out with development consent; and
- development that is prohibited.

The Project falls into the classification of development that may be carried out with development consent.

Development Consent for the Project would be sought under the State Significant Development provisions (i.e. Division 4.7) under Part 4 of the EP&A Act. The EP&A Act and EP&A Regulation generally set the framework for planning and environmental assessment in NSW.

Under section 4.36 of the EP&A Act, a class of development, such as mining, may be declared as State Significant Development by a State Environmental Planning Policy (SEPP).

Clause 8 of the State and Regional Development SEPP provides that the development is declared to be State Significant Development for the purposes of the EP&A Act if:

- the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without Development Consent under Part 4 of the EP&A Act (first criterion); and

- the development is specified in Schedule 1 or 2 (second criterion).

With respect to the first criterion identified above, the Project may be carried out only with Development Consent under Part 4 of the EP&A Act, pursuant to clause 7 of the Mining SEPP (described further below).

In regard to the second criterion identified above, development for the purpose of mining that is coal or mineral sands mining, or has a capital investment value of more than \$30 million, is specified in Schedule 1, Item 5 as being State Significant Development.

The Project is development for the purpose of coal mining and also has a capital investment value of more than \$30 million. Therefore, the Project would be State Significant Development.

Development Consent would be sought from the NSW Minister for Planning or the Independent Planning Commission.

### ***Permissibility of the Project***

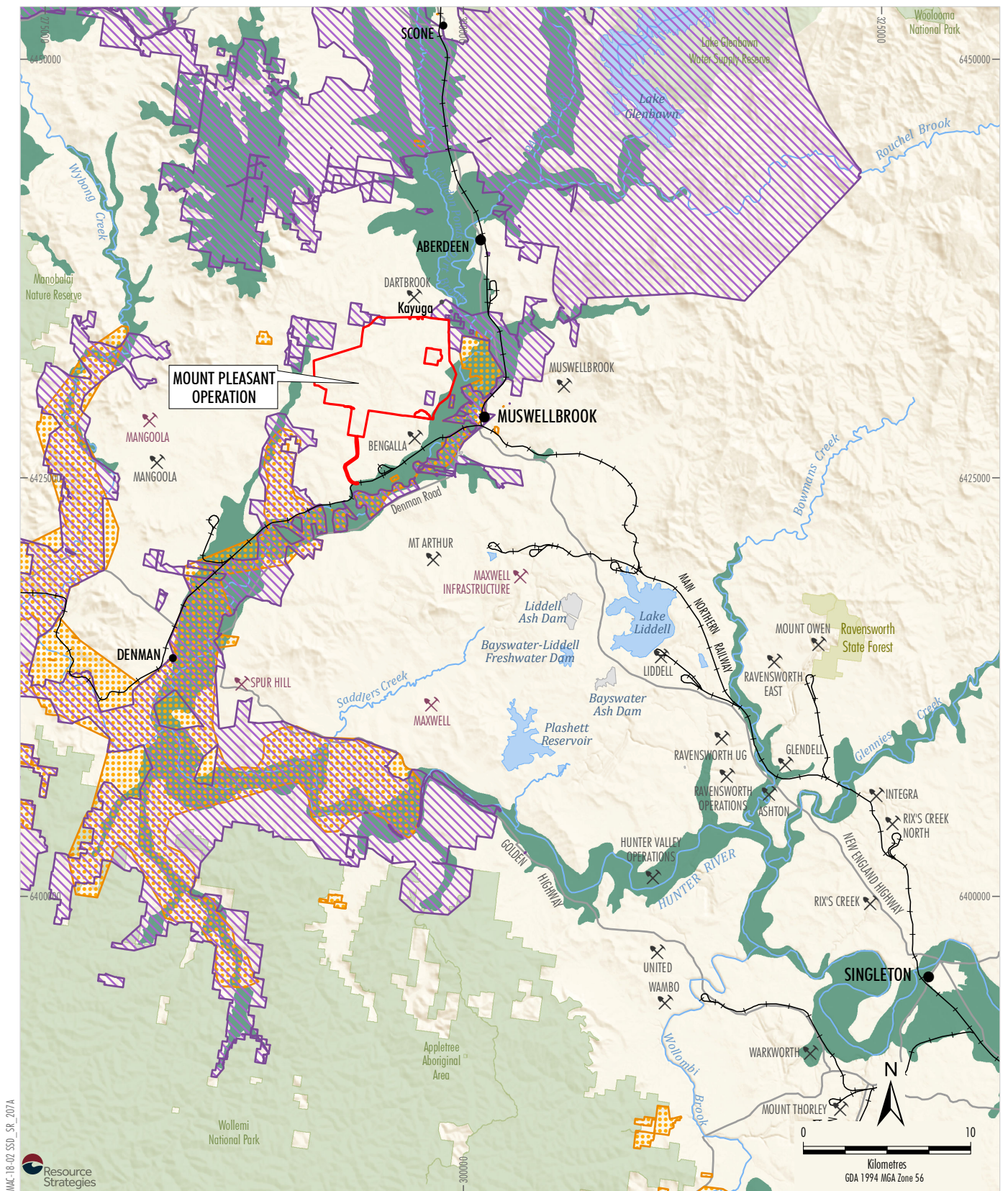
Section 4.38 of the EP&A Act provides that development consent may not be granted under Division 4.7 of Part 4 if the development is *wholly* prohibited by an environmental planning instrument, but may be granted despite the development being *partly* prohibited by an environmental planning instrument.

The Project provisional Development Application Area is covered by the Muswellbrook LEP. The provisional Development Application Area includes land zoned under the Muswellbrook LEP as:

- Zone RU1 (Primary Production);
- Zone E3 (Environmental Management);
- Zone SP2 (Infrastructure) associated with the Muswellbrook-Ulan Railway Line; and
- Zone W1 (Natural Waterways).

It is noted that the W1 Zone in the Provisional Development Application area is associated with the approved Mount Pleasant Operation Hunter River Pump Stations. Open cut mining is permitted with consent in the RU1 Zone (Primary Production) under the Muswellbrook LEP.





**MACHEnergy**  
**MOUNT PLEASANT OPTIMISATION PROJECT**  
**Regional Biophysical Strategic Agricultural Land**  
**and Critical Industry Cluster Mapping**

**Figure 8**

The SP2 Zone in the Provisional Development Application area is associated with the existing/approved Mount Pleasant Operation rail infrastructure in the Muswellbrook-Ulan Railway Line corridor. Rail infrastructure is development that is permitted with consent under zone SP2 in the Muswellbrook LEP.

Subject to the application of the Mining SEPP (as discussed below), open cut mining would be prohibited under the Muswellbrook LEP in Zone E3.

Clause 5(3) of the Mining SEPP gives it primacy where there is any inconsistency between the provisions in the Mining SEPP and the provisions in any other environmental planning instrument (subject to limited exceptions, which are not enlivened by the Project).

The practical effect of clause 5(3) for the Project is that if there is any inconsistency between the provisions of the Mining SEPP and those contained in the Muswellbrook LEP, the provisions of the Mining SEPP will prevail.

Clauses 6 and 7 of the Mining SEPP provide what types of mining development are permissible without development consent and what types are permissible only with development consent.

Clause 7(1) states:

**7 Development permissible with consent**

**(1) Mining**

*Development for any of the following purposes may be carried out only with development consent:*

...

**(b) mining carried out:**

- (i) on land where development for the purposes of agriculture or industry may be carried out (with or without development consent), or*
- (ii) on land that is, immediately before the commencement of this clause, the subject of a mining lease under the Mining Act 1992 or a mining licence under the Offshore Minerals Act 1999,*

...

**(d) facilities for the processing or transportation of minerals or mineral bearing ores on land on which mining may be carried out (with or without development consent), but only if they were mined from that land or adjoining land,**

...

'Extensive agriculture' is permissible under the Muswellbrook LEP without consent in the E3 Environmental Management zone. Clause 7(1)(b)(i) of the Mining SEPP provides that development for the purposes of 'mining' may be carried out with development consent on land where development for the purposes of agriculture is permissible. Therefore, while open cut mining in Zone E3 is prohibited under the Muswellbrook LEP, the Mining SEPP prevails and provides that mining can be carried out with consent on these lands.

In land zoned W1 under the Muswellbrook LEP, that instrument has the effect of prohibiting the construction and use of water pumps and pipelines that are works associated with a mine. However, given that the Project is State Significant Development, the consent authority for the Project is authorised by section 4.38(3) of the EP&A Act to grant development consent for those facilities, notwithstanding that those facilities cannot be granted development consent under the Muswellbrook LEP.

Section 4.38(3) is in Division 4.7 of the EP&A Act, which contains the provisions of the Act that are concerned with State Significant Development. Section 4.38(3) states:

- (3) Development consent may be granted despite the development being partly prohibited by an environmental planning instrument.*

It follows that the consent authority for the Project is conferred with authority to grant development consent for the approved Mount Pleasant Operation Hunter River Pump Stations, or an expansion of those facilities.

**Planning Provisions**

*State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP)*

The EIS would include detailed consideration of the aims of the Mining SEPP (Part 1) and the matters for consideration in Part 3 of the Mining SEPP based on the Project description and findings of the key environmental impact assessment studies.

A preliminary review of the Project against the Mining SEPP did not identify any matters that could prevent the Project from proceeding.

As noted above, an application for a Gateway Certificate under clause 17F of the Mining SEPP would not be required for the Project.



### Other State Environmental Planning Policies

In addition to the Mining SEPP, the following SEPPs may potentially be relevant to the Project:

- State and Regional Development SEPP;
- *State Environmental Planning Policy (Infrastructure) 2007*;
- *State Environmental Planning Policy No. 33 (Hazardous and Offensive Development) (SEPP 33)*;
- *State Environmental Planning Policy No. 44 – Koala Habitat Protection*; and
- *State Environmental Planning Policy No. 55 (Remediation of Land)*.

Relevant provisions and objectives of the above SEPPs would be considered in the preparation of the EIS.

### Planning Strategies

The following strategic planning documents would be considered in preparation of the EIS:

- *Hunter Regional Plan 2036* (NSW Government, 2016);
- *Upper Hunter Strategic Regional Land Use Plan* (NSW Government, 2012) (recommended for review in NSW Government [2016]); and
- *Muswellbrook Shire Council Community Strategic Plan 2017-2027* (Muswellbrook Shire Council, 2017).

## 4.3 OTHER APPROVALS AND LICENCES

### *Mining Act, 1992*

Mining activities for the Project would be wholly located within the mining leases obtained in support of the approved Mount Pleasant Operation (e.g. ML 1645) (Plate 4).

Under the NSW *Mining Act, 1992*, environmental protection and rehabilitation are regulated by conditions included in all mining leases, including requirements for the submission of a Mining Operations Plan and Annual Reviews.

### *Protection of the Environment Operations Act, 1997*

The NSW *Protection of the Environment Operations Act, 1997* (PoEO Act) and the NSW *Protection of the Environment Operations (General) Regulation, 2009* set out the general obligations for environmental regulation in NSW.

The approved Mount Pleasant Operation currently operates under EPL 20850, granted under the PoEO Act. EPL 20850 contains conditions that relate to emission and discharge limits, operational shutdown requirements under specific combinations of environmental conditions, environmental monitoring, and reporting.

If approved, the Project would require some variations to EPL 20850, which would include expansion of the EPL area to correspond with the expanded Project area.



**Plate 4**  
**Environmental Surveys Adjacent to Mining Lease 1645**

### ***Roads Act, 1993***

If the Project is approved, MACH would apply for the necessary consents under section 138 of the *Roads Act, 1993* associated with works on the public road network (Plate 5) (e.g. construction of the Northern Link Road and public road closure of the eastern portion of Castlerock Road).

In accordance with section 4.42(1)(f) of the EP&A Act, if the Project is approved as State Significant Development, the grant of a consent under section 138 of the *Roads Act, 1993* cannot be refused if that consent is necessary for the carrying out of the approved Project and is to be substantially consistent with the Project's development consent.

### ***Water Management Act, 2000***

Under section 4.41(1)(g) of the EP&A Act, if the Project is approved as State Significant Development, water use approvals under section 89, water management work approvals under section 90, or activity approvals (excluding aquifer interference approvals) under section 91 of the *Water Management Act, 2000* would not be required for the Project.

The EIS would include consideration of the Project against the water management principles and access licence dealing principles under the *Water Management Act, 2000*. The EIS would also identify water access licences required for each water source associated with the Project.

### ***Commonwealth Environment Protection and Biodiversity Conservation Act, 1999***

The Mount Pleasant Project was previously referred under the EPBC Act in 2011 and determined to be a 'Controlled Action' (EPBC 2011/5795). Approval of the Mount Pleasant Project was granted under the EPBC Act in 2012 and extends to 2035.

The Project will also be referred to the Commonwealth Minister for the Environment and Energy for consideration as to whether the incremental development associated with the Project constitutes a 'Controlled Action' and requires approval under the EPBC Act.

If the Project is assessed under the assessment bilateral agreement with the NSW Government for potential impacts on water resources, the NSW and Commonwealth Governments may jointly obtain the advice of the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development on the Project.



**Plate 5**  
**Public Road Network in the Vicinity of the Mount Pleasant Operation**



## 5 ENGAGEMENT DURING PROJECT SCOPING

MACH engages regularly with the community through the following mechanisms:

- a dedicated website (<https://machenergyaustralia.com.au/>);
- Mount Pleasant Operation Community Consultative Committee (CCC) (Plate 6) quarterly meetings;
- maintenance of a community hotline; and
- regular community newsletters.

Consultation to date in relation to the proposed Project, which has assisted to inform the preparation of this Scoping Report, has included:

- A Conceptual Project Development Plan meeting with representatives of the Division of Resources and Geoscience (DRG) (within DPIE) on 2 October 2019.
- An introductory Project briefing of the Mount Pleasant Operation CCC on 3 October 2019.
- A general Project scoping meeting and social impact assessment scoping meeting with representatives of the DPIE on 8 October 2019 and 9 October 2019, respectively.
- A Project briefing with representatives of the NSW Environment Protection Authority (EPA) on 30 October 2019.
- Project briefings with the Upper Hunter Shire Council and Muswellbrook Shire Council on 28 October and 1 November 2019, respectively.
- A Project Aboriginal Cultural Heritage Assessment information session with Registered Aboriginal Parties on 5 November 2019.
- Project briefings with the Dartbrook Mine and the Bengalla Mine on 19 and 26 November 2019, respectively.



**Plate 6**  
**Mount Pleasant Operation Community Consultative Committee**

In addition to the general Project consultation outlined above, Just Add Lime Ltd (JAL) also conducted Social Impact Assessment (SIA) scoping stage engagement in October and November 2019. JAL engaged with a range of stakeholders to ascertain views on existing cumulative and potential incremental Project social impacts, including (Attachment C):

- the Mount Pleasant Operation CCC;
- Mount Pleasant Operation Aboriginal Community Development Fund;
- Muswellbrook Shire Council;
- Upper Hunter Shire Council;
- Denman, Aberdeen, Muswellbrook and Scone Healthy Environment Group;
- Wonnarua Nation Aboriginal Corporation;
- Wanaruah Aboriginal Land Council;
- Muswellbrook Chamber of Commerce; and
- some nearby residents and landholders.

Based on the consultation conducted to date, there is likely to be a high level of public and regulatory interest in the Project.

Potential Project incremental impacts, including potential cumulative impacts with other mining developments, would be investigated in the Project EIS specialist studies.

Key existing and potential environmental/social impacts raised in MACH Project engagement to date has included:

- cumulative dust levels being experienced in Muswellbrook and the Hunter Valley more generally;
- mine noise, particularly during the night-time period;
- environmental and associated social impacts being experienced by landholders located proximal to the Mount Pleasant Operation and other local mines (Attachment C);
- socio-economic benefits of the approved Mount Pleasant Operation employment and expenditure and how Project long-term employment may extend or build upon these benefits;
- the proportion of economic and social benefits of local mining being realised in Muswellbrook (Attachment C) (Plate 7);
- post-mining final landform and final void water quality;
- the importance of coal royalties to NSW State revenue; and
- mine workforce residential locations, and how this may interact with local expenditure, housing demand, housing affordability and social cohesion (Attachment C).



**Plate 7**  
**Bridge Street Muswellbrook**



## 6 MATTERS AND IMPACTS

### 6.1 OVERVIEW

The DPIE has published a draft Scoping Worksheet that includes a generic checklist of matters to assist proponents to:

- consider all matters;
- filter out any matters that are not relevant to the Project; and
- inform the likely level of assessment required in the EIS.

The draft Scoping Worksheet has been reviewed to identify the key potential environmental issues associated with the construction and operation of the Project. Key potential environmental issues are those environmental aspects that will require Project-specific assessment to assess the potential impacts and develop measures to avoid, mitigate and/or monitor the potential impacts of the Project.

The proposed level and scope of assessments have been identified (Attachment B) to assist the DPIE with issuing of the SEARs for the Project under clause 3 of Schedule 2 of the EP&A Regulation. The proposed level and scope of assessments were determined based upon:

- understanding of the local and regional context and the Project (Section 3);
- feedback from stakeholder consultation undertaken to date (Section 5);
- baseline environmental data; and
- experience from previous environmental management and approvals processes at the Mount Pleasant Operation.

### 6.2 KEY ISSUES AND OTHER ISSUES FOR INCLUSION IN THE ENVIRONMENTAL IMPACT STATEMENT

The key environmental issues identified are provided in Table 4 with a preliminary list of study requirements to address these issues.

Recognised specialists will be commissioned to conduct the studies outlined in Table 4, and independent peer review will be conducted for select key studies in consideration of the draft *Peer Review* guideline (NSW Government, 2017b) (or its latest version).

In addition to consideration of the key potential environmental issues, potential impacts on the following environmental aspects of less direct relevance to the Project will also be considered and addressed as a component of the EIS:

- potential community health impacts;
- greenhouse gas emissions;
- management of the existing biodiversity conservation areas;
- potential odour emissions;
- potential impacts on port or airport facilities;
- flooding;
- management of bushfire risk; and
- preliminary hazard analysis in accordance with SEPP 33.

It is noted that the Project open cut would not intersect any biophysical strategic agricultural land or critical industry clusters mapped by the NSW Government that would not already be disturbed by the approved Mount Pleasant Operation (Figure 8). Consideration of potential Project impacts on critical industry clusters would, therefore, be on indirect effects.

Assessment of the key potential environmental issues and the other potential impacts identified above will include consideration of:

- the existing environment, using baseline data gathered over the life of the Mount Pleasant Operation;
- potential impacts of all stages of the Project, including relevant cumulative impacts;
- measures that could be implemented to avoid, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the Project; and
- contingency plans and/or adaptive management for managing any potentially significant residual risks to the environment.

Assessments for the EIS would consider applicable policies, guidelines and plans included in the *Indicative Secretary's Environmental Assessment Requirements - For state significant mining developments* (NSW Government, 2015a) (or its latest version).

**Table 4**  
**Key Potential Environmental Issues, Proposed Assessment and Preliminary Strategies**

Environmental/Social Matter		Proposed Level and Scope of Assessment	Preliminary Strategies to Address Potential Impacts (to be refined during detailed impact assessment)
Access	Road and Rail Network	<ul style="list-style-type: none"> <li>Assessment of changes in traffic volumes on the surrounding road network – in accordance with the <i>Guide to Traffic Generating Developments</i> (Roads and Traffic Authority, 2002).</li> <li>Assessment of potential cumulative impacts on the road network resulting from the Project and nearby developments and mines.</li> <li>Investigation of measures to avoid, mitigate and/or monitor the potential impacts of the Project.</li> </ul>	<ul style="list-style-type: none"> <li>Use of the existing site access road from Wybong Road and the approved Stage 2 rail infrastructure.</li> <li>Continued prohibition of the use of the Kayuga Road bridge to access the Mount Pleasant Operation.</li> <li>Design of the revised Northern Link Road alignment in consideration of relevant Austroads standards.</li> <li>Continued road maintenance contributions to Muswellbrook Shire Council, as appropriate.</li> </ul>
Air	Particulate Matter Gases	<ul style="list-style-type: none"> <li>Modelling and assessment of potential air quality impacts as a result of Project activities – in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales</i> (EPA, 2016).</li> <li>Assessment of potential cumulative impacts resulting from the Project and nearby developments and mines.</li> <li>Investigation of measures to avoid, mitigate and/or monitor the potential impacts of the Project.</li> <li>Engagement with nearby receivers concerned about potential particulate matter impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Use of the existing Mount Pleasant Operation CHPP and locating new mine infrastructure away from sensitive receptors (i.e. in proximity to existing infrastructure), with appropriate emission control (e.g. enclosures and water sprays).</li> <li>Minimisation of active disturbance areas and progressive rehabilitation of disturbed areas.</li> <li>Continued implementation of feasible and reasonable mitigation measures on-site to minimise particulate matter generation during construction activities and mining operations, including proactively modifying mining operations in response to adverse meteorological conditions.</li> <li>Utilisation of the existing air quality monitoring network, with augmentations as required.</li> <li>Application of the <i>Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments</i> (NSW Government, 2018).</li> </ul>
Amenity	Noise	<ul style="list-style-type: none"> <li>Modelling and assessment of potential noise impacts as a result of construction activities and mining operations, including road and rail traffic – in accordance with relevant guidelines, including the <i>Noise Policy for Industry</i> (EPA, 2017), <i>NSW Road Noise Policy</i> (Department of Environment, Climate Change and Water, 2011) and <i>Interim Construction Noise Guideline</i> (Department of Environment and Climate Change, 2009).</li> <li>Assessment of potential cumulative impacts resulting from the Project and nearby developments and mines.</li> <li>Investigation of measures to avoid, mitigate and/or monitor the potential impacts of the Project.</li> <li>Engagement with nearby receivers concerned about potential impacts on acoustic amenity.</li> </ul>	<ul style="list-style-type: none"> <li>Use of the existing, cladded, Mount Pleasant Operation CHPP and locating new mine infrastructure away from sensitive receptors (i.e. in proximity to existing infrastructure), with appropriate acoustic treatments (e.g. cladding).</li> <li>Continued implementation of feasible and reasonable mitigation measures on-site to minimise noise generation during construction activities and mining operations, including proactively modifying mining operations in response to adverse meteorological conditions.</li> <li>Utilisation of the existing noise monitoring network, with augmentations as required.</li> <li>Application of the <i>Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments</i> (NSW Government, 2018).</li> </ul>

**Table 4 (Continued)**  
**Key Potential Environmental Issues, Proposed Assessment and Preliminary Strategies**

Environmental/Social Matter		Proposed Level and Scope of Assessment	Preliminary Strategies to Address Potential Impacts (to be refined during detailed impact assessment)
Amenity (continued)	Vibration	<ul style="list-style-type: none"> <li>Assessment of potential vibration and overpressure impacts as a result of blasting conducted for the Project.</li> </ul>	<ul style="list-style-type: none"> <li>Continued implementation of existing blast management procedures to maintain compliance with Project blast criteria.</li> </ul>
	Visual	<ul style="list-style-type: none"> <li>Modelling and assessment of potential landscape and visual impacts, as well as assessment of dynamic landscape impacts, as a result of construction and mining operations.</li> </ul>	<ul style="list-style-type: none"> <li>Continued implementation of existing visual impact minimisation measures, including visual bunding and planting of vegetation screens.</li> <li>Development of an integrated waste rock emplacement landform that incorporates geomorphic drainage design principles for hydrological stability, and varying topographic relief to be more natural in exterior appearance.</li> </ul>
Biodiversity	Native Vegetation Native Fauna	<ul style="list-style-type: none"> <li>Assessment of potential impacts on any terrestrial and aquatic species, populations, ecological communities or their habitats, including groundwater and surface water assessments.</li> <li>Assessment of potential impacts on biodiversity in accordance with the <i>Biodiversity Assessment Method</i> (Office of Environment and Heritage, 2017).</li> <li>Identification of measures that would be implemented to maintain or improve the biodiversity values of the surrounding region in the medium to long term.</li> </ul>	<ul style="list-style-type: none"> <li>Avoiding and minimising impacts on biodiversity by forgoing the clearance of some areas of approved disturbance to minimise the additional disturbance required for the Project.</li> <li>Continued consideration of environmental assessment outcomes during detailed mine planning, including minimisation of vegetation disturbance - particularly areas with higher ecological values.</li> <li>Continued implementation of existing surface disturbance protocols, including pre-clearance surveys.</li> <li>Continued implementation of weed and feral animal control measures.</li> <li>Development of a rehabilitation strategy for the Project that expands on the concepts of the rehabilitation strategy for the approved Mount Pleasant Operation.</li> <li>Implementation of offset and compensatory measures in accordance with NSW and Commonwealth Government policies.</li> </ul>
Built Environment	Public Infrastructure	<ul style="list-style-type: none"> <li>Assessment of changes in traffic volumes on the surrounding road network – in accordance with the <i>Guide to Traffic Generating Developments</i> (Roads and Traffic Authority, 2002).</li> <li>Focused engagement with Muswellbrook Shire Council and other stakeholders regarding potential road transport impacts on the local road network.</li> <li>Assessment of potential vibration and overpressure impacts as a result of blasting conducted for the Project.</li> </ul>	<ul style="list-style-type: none"> <li>Use of the existing site access road from Wybong Road and the approved Stage 2 rail infrastructure.</li> <li>Continued prohibition of the use of the Kayuga Road bridge to access the Mount Pleasant Operation.</li> <li>Design of the revised Northern Link Road alignment in consideration of relevant Austroads standards.</li> <li>Continued road maintenance contributions to Muswellbrook Shire Council, as appropriate.</li> <li>Continued implementation of existing blast management procedures to maintain compliance with Project blast criteria.</li> </ul>

**Table 4 (Continued)**  
**Key Potential Environmental Issues, Proposed Assessment and Preliminary Strategies**

Environmental/Social Matter		Proposed Level and Scope of Assessment	Preliminary Strategies to Address Potential Impacts (to be refined during detailed impact assessment)
Economic	Natural Resource Use	<ul style="list-style-type: none"> <li>Economic assessment of potential impacts on the regional and NSW economy and a cost-benefit analysis – in accordance with the <i>Guidelines for the economic assessment of mining and coal seam gas proposals</i> (NSW Government, 2015c).</li> <li>Project justification, including consideration of alternatives, principles of ecologically sustainable development and the objects of the EP&amp;A Act.</li> <li>Consideration of the significance of the coal resource.</li> <li>Engagement with other industries and businesses in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Develop strategies to maximise local employment and support of local businesses.</li> <li>Continued community contributions by MACH, such as contributions to the Aboriginal Community Development Fund.</li> </ul>
	Livelihood Opportunity Cost		
Hazards and Risks	Bushfire	<ul style="list-style-type: none"> <li>Assessment of potential bushfire risk in consideration of bushfire risk management plan prepared by the Muswellbrook Bush Fire Management Committee.</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing management of bushfire risks in accordance with the Mount Pleasant Operation Bushfire Management Plan.</li> <li>Implementation of control measures to prevent and manage bushfires, which focus on minimising the amount of fuel available at the Project and on its surrounding land.</li> </ul>
	Steep Slopes	<ul style="list-style-type: none"> <li>Geotechnical assessment to confirm landform stability (including open cut pit highwalls).</li> </ul>	<ul style="list-style-type: none"> <li>Design of Project landform to comply with outcomes of Geotechnical Assessment.</li> </ul>
Heritage	Natural	<ul style="list-style-type: none"> <li>Assessment of potential impacts on natural features such as the Hunter River and the associated alluvial flats.</li> <li>Assessment of potential cumulative impacts resulting from the Project and other cumulative impacts on natural heritage and landscapes.</li> <li>Investigation of measures to avoid, mitigate, monitor and manage the potential impacts of the Project.</li> <li>Focused engagement with interested stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>Surface disturbance protocols.</li> <li>Management of controlled water discharges in accordance with EPL 20850 and the HRSTS.</li> <li>Review and update of the relevant site-wide management plans.</li> </ul>
	Cultural	<ul style="list-style-type: none"> <li>Assessment of potential impacts on Aboriginal and non-Aboriginal cultural heritage and landscapes.</li> <li>Assessment of potential cumulative impacts resulting from the Project and other known or potential impacts on cultural heritage and landscapes.</li> <li>Investigation of measures to avoid, mitigate, monitor and manage the potential impacts of the Project.</li> <li>Focused engagement with interested stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>Management of cultural heritage sites in accordance with the Aboriginal Heritage Management Plan, and the Aboriginal Heritage Conservation Strategy.</li> <li>Involvement of Aboriginal stakeholders during the assessment and operational phases.</li> <li>Review of the existing Aboriginal Heritage Conservation Areas and consideration of the appropriate arrangements to provide appropriate long-term security for items of Aboriginal heritage and Aboriginal cultural values.</li> </ul>



**Table 4 (Continued)**  
**Key Potential Environmental Issues, Proposed Assessment and Preliminary Strategies**

Environmental/Social Matter		Proposed Level and Scope of Assessment	Preliminary Strategies to Address Potential Impacts (to be refined during detailed impact assessment)
Heritage (continued)	Aboriginal Cultural	<ul style="list-style-type: none"> <li>Assessment of impacts on items of Aboriginal heritage and Aboriginal cultural values in accordance with the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> (NSW Department of Environment, Climate Change and Water, 2010) and <i>Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation</i> (NSW Department of Environment and Conservation, 2005).</li> <li>Assessment of potential cumulative impacts resulting from the Project and other known or potential impacts on Aboriginal cultural heritage.</li> <li>Investigation of measures to avoid, mitigate, monitor and manage the potential impacts of the Project.</li> <li>Focused engagement with interested Aboriginal parties.</li> </ul>	<ul style="list-style-type: none"> <li>Consideration of environmental assessment outcomes during detailed Project design work (e.g. locations of Aboriginal heritage sites).</li> <li>Involvement of the Aboriginal stakeholders during the assessment and operational phases.</li> <li>Continued implementation of Ground Disturbance Permit process.</li> <li>Continued implementation of the existing management measures to mitigate and monitor potential impacts on Aboriginal heritage.</li> <li>Review and update of the Aboriginal Heritage Management Plan.</li> <li>Review of the existing Aboriginal Heritage Conservation Areas and consideration of the appropriate arrangements to provide appropriate long-term security for items of Aboriginal heritage and Aboriginal cultural values.</li> </ul>
Land	Stability and/or Structure Topography	<ul style="list-style-type: none"> <li>Assessment of proposed final landform stability using landscape evolution and/or erosion modelling.</li> <li>Key erosion parameters and rates for the modelling would be developed using site-specific data.</li> </ul>	<ul style="list-style-type: none"> <li>Development of micro-relief in final landform design using catchment/drainage review and landform design software.</li> <li>Final landform drainage lines would be designed to accommodate natural erosive processes, including consideration of key erosional and geomorphic characteristics such as nature of bed material, presence of rock outcrops, bed features, and bed and bank vegetation.</li> <li>The waste rock emplacement final landform would be designed to provide macro-relief and integrate with natural drainage features and topography.</li> </ul>
	Soil Chemistry	<ul style="list-style-type: none"> <li>Preparation of a Land and Soil Assessment, including laboratory testing of soil characteristics.</li> </ul>	<ul style="list-style-type: none"> <li>Stripping and salvaging topsoil to maximise its value for re-use in rehabilitation, as determined by soil mapping and suitable soil stripping depths.</li> <li>Managing topsoil stockpiles to maintain seed reserves and microbial soil associations.</li> </ul>
	Capability	<ul style="list-style-type: none"> <li>Preparation of a Land and Soil Assessment that would identify the existing Land and Soil Capability Classes in the vicinity of the Project.</li> </ul>	<ul style="list-style-type: none"> <li>Suitable areas in the final landform would be rehabilitated to a standard suitable for agricultural (or industrial) post-mining land use (including potential intensive land use areas).</li> <li>Potential agriculturally intensive land use areas would be identified based on proximity to nearby supporting infrastructure and/or water storage facilities.</li> </ul>

**Table 4 (Continued)**  
**Key Potential Environmental Issues, Proposed Assessment and Preliminary Strategies**

Environmental/Social Matter		Proposed Level and Scope of Assessment	Preliminary Strategies to Address Potential Impacts (to be refined during detailed impact assessment)
Social	Services and Facilities Cohesion, Capital and Resilience Housing	<ul style="list-style-type: none"> <li>Preparation of an SIA in accordance with the <i>Social impact assessment guideline – For State significant mining, petroleum production and extractive industry development</i> (SIA Guideline) (NSW Government, 2017c).</li> <li>Assessment of potential cumulative impacts resulting from the Project and nearby developments and mines.</li> <li>Investigation of measures to avoid, mitigate and/or monitor the potential impacts of the Project.</li> <li>Focused engagement with relevant stakeholders as outlined in the SIA Scoping Report (Attachment C).</li> </ul>	<ul style="list-style-type: none"> <li>Development of additional and continued implementation of the existing strategies to maximise local employment and support of local businesses.</li> <li>Continued maintenance of the Aboriginal Community Development Fund and implementation of appropriate strategies to maximise opportunities for Indigenous employment and Indigenous businesses.</li> <li>Development of a long-term community contributions plan.</li> <li>Update to Voluntary Planning Agreement with Muswellbrook Shire Council.</li> </ul>
Water	Water Quality Water Availability Hydrological Flows	<ul style="list-style-type: none"> <li>Assessment of the impacts of the Project on the quantity and quality of the region's water resources, connectivity between water sources, water-dependent assets and water-related infrastructure.</li> <li>Groundwater assessment, including consideration of the Aquifer Interference Policy.</li> <li>Numerical groundwater modelling in accordance with the <i>Australian Groundwater Modelling Guidelines</i> (Barnett et al., 2012) and <i>Murray-Darling Basin Commission (MDBC) Groundwater Flow Modelling Guideline</i> (Middlemis et al., 2001).</li> <li>Detailed site water balance for the Project, incorporating development of a water management strategy for the life of the Project.</li> <li>Assessment of potential cumulative impacts resulting from the Project and nearby developments and mines.</li> <li>Investigation of measures to avoid, mitigate, remediate, monitor and/or offset the potential impacts of the Project.</li> <li>Expert peer review of the groundwater assessment in accordance with the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development Information Guidelines.</li> <li>Focused engagement with near neighbours concerned about potential impacts on water availability.</li> </ul>	<ul style="list-style-type: none"> <li>Continued implementation of the existing management measures to mitigate, monitor, remediate, manage and offset potential impacts on water resources.</li> <li>Review and update of the site-wide Water Management Plan.</li> <li>Groundwater and surface water monitoring networks.</li> <li>Water management strategy for the Project based on regular reviews of the site water balance.</li> <li>Erosion and sediment control during construction and operation.</li> <li>Appropriate licensing in accordance with the legislative requirements of the <i>Water Management Act, 2000</i>.</li> <li>Mitigation (e.g. bore re-conditioning, alternative water supply) or other contingency measures in the event that private groundwater users or surface water uses are adversely affected by the Project.</li> <li>Management of controlled water discharges in accordance with EPL 20850 and the HRSTS.</li> </ul>

### 6.3 CUMULATIVE IMPACT ASSESSMENT

Table 4 outlines the environmental assessment matters that will include a cumulative impact assessment.

Cumulative impact assessments in the EIS will:

- take into consideration past, present and reasonably foreseeable planned development that are relevant due to their proximity and/or potential to interact with potential Project impacts;
- outline how cumulative impacts may be managed through strategic planning or policy (e.g. water licensing and the HRSTS); and
- document how cumulative impacts have been considered and, to the fullest extent practical, the Project's relative contribution to those potential cumulative impacts.

## 7 PROPOSED ENGAGEMENT

### 7.1 PROJECT COMMUNITY AND STAKEHOLDER ENGAGEMENT PROGRAM

The EIS would be supported by an SIA prepared in accordance with the SIA Guideline (NSW Government, 2017c).

A community and stakeholder engagement program has been developed for the Project that would support both the EIS and SIA processes. Key objectives of this program are to:

- engage with Project stakeholders, including the existing workforce (Plate 8) about the progress and nature of the Project;
- recognise and respond to local interests or concerns regarding the Project; and
- continue the ongoing dialogue between MACH and local landholders and neighbours.

The issues raised and outcomes of the community and stakeholder engagement program would be reported in the EIS and SIA.

Attachment C provides a SIA Scoping Report prepared by JAL in consideration of the SIA Guideline. The SIA Scoping Report:

- identifies an area of social influence that may be affected by the existing Mount Pleasant Operation and the Project; and

- identifies potential social impacts for further investigation in the SIA and the proportionate level of assessment for each potential impact.

The Project engagement program would include, but not be limited to, the following government agencies and authorities:

- DPIE;
  - Planning and Assessment;
  - Biodiversity and Conservation Division;
  - Crown Lands;
  - Dams Safety NSW;
  - Department of Primary Industries (DPI) (including DPI Agriculture and DPI Fisheries);
  - DRG;
  - EPA;
  - Hunter Local Land Services;
  - Natural Resources Access Regulator;
  - Resources Regulator; and
  - Water;
- Muswellbrook Shire Council;
- Upper Hunter Shire Council;
- Singleton Council;
- NSW Health;
- Transport for NSW (including Roads and Maritime Services);
- Commonwealth Department of Environment and Energy;
- Department of Premier and Cabinet – Heritage; and
- NSW Rural Fire Service.



**Plate 8**  
**Example Mount Pleasant Operation Personnel**



The stakeholder engagement program would also incorporate recognition of other key potential stakeholders, including:

- Muswellbrook, Scone, Singleton and surrounding smaller communities/localities such as Kayuga, Wybong and Castlerock (Attachment C);
- the Aboriginal community;
- other industries and businesses in the area, including the equine industry, retail and hospitality businesses and mining-related support services;
- neighbouring mining operations (Bengalla Mine, Dartbrook Mine, Mt Arthur Coal Mine, Mangoola Coal and Muswellbrook Coal Mine);
- local, State and Federal elected representatives;
- interested non-government organisations;
- neighbouring residents;
- infrastructure owners (e.g. Ausgrid, Telstra);
- industry groups and private enterprises (e.g. Hunter Thoroughbred Breeders Association and Hunter Business Chamber);
- potential downstream infrastructure providers (e.g. Australian Rail Track Corporation, coal chain operators, Port Waratah Coal Services, Newcastle Coal Infrastructure Group); and
- environment and community groups (e.g. Muswellbrook Race Club, Aboriginal Community Development Fund, Wanaruah Local Aboriginal Land Council).

The EIS engagement program will include the use of a variety of consultation mechanisms, such as:

- public availability of key documents (e.g. this Scoping Report and the EIS);
- existing MACH community information mechanisms;
- conduct of the SIA, including engagement with a range of stakeholders that may have an interest in the Project (refer Attachment C);
- consultation with the Aboriginal community in accordance with the requirements of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (NSW Department of Environment, Climate Change and Water, 2010); and
- meetings with government agencies and other stakeholders.

## 8 CONCLUSION

An EIS will be prepared for the Project in accordance with the SEARs and in consideration of feedback obtained during the community and stakeholder engagement program.

It is currently proposed that the EIS would include the following key components:

Executive Summary	A summary of the Project and the key conclusions of the EIS.
Section 1	An introduction to the Project and the EIS.
Section 2	Describing the approved Mount Pleasant Operation.
Section 3	Describing the various components of the Project including Project rehabilitation and mine closure.
Section 4	Outlining the strategic planning context.
Section 5	Describing statutory provisions relevant to the Project.
Section 6	Describing the consultation and engagement undertaken in relation to the EIS and ongoing community involvement.
Section 7	Environmental assessment of the Project, including a description of the existing environment, an assessment of potential impacts and a description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage and/or monitor the potential impacts of the Project.
Section 8	Describing how the Project (when compared with other alternatives) is in the public interest and balances potential impacts, strategic needs, and benefits.
Attachments	Supporting information for the EIS, such as the Development Application Area, peer review letters and Capital Investment Value estimate.
Appendices	Detailed studies into key potential environmental issues and other environmental aspects (if relevant).

## 9 REFERENCES

- Barnett, B., Townley, L.R., Post, V., Evans, R.E., Hunt, R.J., Peeters, L., Richardson, S., Werner, A.D., Knapton, A. and Boronkay, A. (2012) *Australian Groundwater Modelling Guidelines*. Waterlines report 82, National Water Commission, Canberra.
- Department of Environment and Climate Change (2009) *Interim Construction Noise Guideline*.
- Department of Environment and Conservation (2005) *Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation*.
- Department of Environment, Climate Change and Water (2010) *Aboriginal cultural heritage consultation requirements for proponents 2010*.
- Department of Environment, Climate Change and Water (2011) *NSW Road Noise Policy*.
- Environment Protection Authority (2016) *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*.
- Environment Protection Authority (2017) *Noise Policy for Industry*.
- Middlemis, H. et al. (2001) *Murray-Darling Basin Commission (MDBC) Groundwater Flow Modelling Guideline*.
- Muswellbrook Shire Council (2017) *Muswellbrook Shire Council Community Strategic Plan 2017-2027*.
- NSW Government (2012) *Upper Hunter Strategic Regional Land Use Plan*.
- NSW Government (2014) *Strategic Statement on NSW Coal*.
- NSW Government (2015a) *Indicative Secretary's Environmental Assessment Requirements - For state significant mining developments*.
- NSW Government (2015b) *Mine Application Guideline – Specific development application requirements for State significant mining and extractive industry developments under the Environmental Planning and Assessment Act 1997*.
- NSW Government (2015c) *Guidelines for the economic assessment of mining and coal seam gas proposals*.
- NSW Government (2016) *Hunter Regional Plan 2036*.
- NSW Government (2017a) *Scoping an Environmental Impact Statement – Draft Environmental Impact Assessment Guidance Series*. June 2017.
- NSW Government (2017b) *Peer Review – Draft Environmental Impact Assessment Guidance Series*. June 2017.
- NSW Government (2017c) *Social impact assessment guideline – For State significant mining, petroleum production and extractive industry development*. September 2017.
- NSW Government (2018) *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments*.
- NSW Government (2019) *Preparing a Scoping Report – Guidance for State Significant Projects (Draft)*. June 2019.
- Office of Environment and Heritage (2017) *Biodiversity Assessment Method*.
- Roads and Traffic Authority (2002) *Guide to Traffic Generating Developments*.



# MACHEnergy

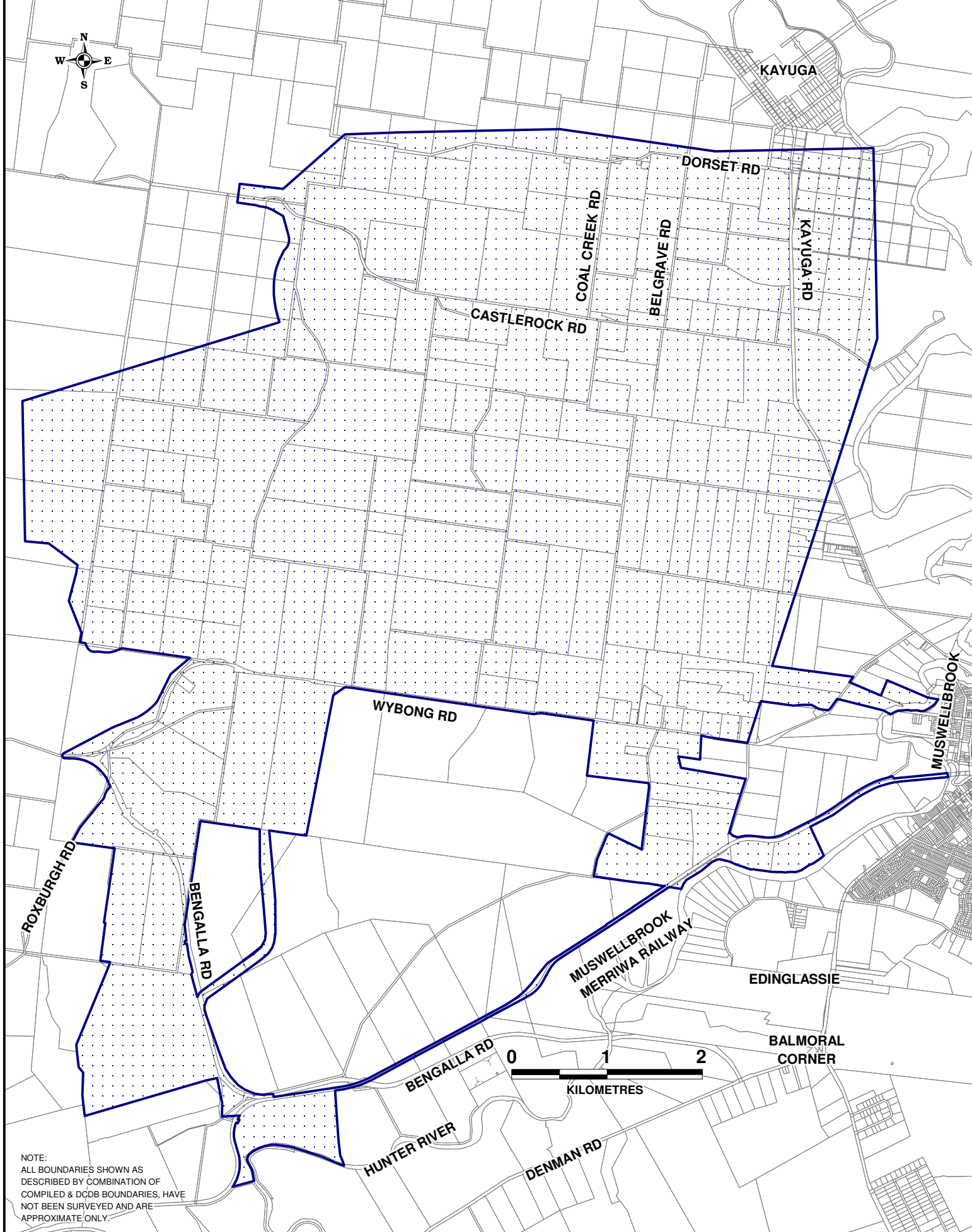
Mount Pleasant Operation

A JOINT VENTURE WITH  
**JODA**  
Japan Coal Development Australia

## Attachment A

Provisional Development Application Area and  
Preliminary Schedule of Lands





**Table A-1**  
**Preliminary Schedule of Lands**

Tenure Type	Lot	Section	Deposited Plan (DP)	Lot Owner/Description
Freehold	1	3	2770	MACH Energy Australia Pty Ltd
Freehold	1	4	2770	MACH Energy Australia Pty Ltd
Freehold	1	5	2770	MACH Energy Australia Pty Ltd
Freehold	1	6	2770	MACH Energy Australia Pty Ltd
Freehold	1	8	2770	MACH Energy Australia Pty Ltd
Freehold	2	1	2770	MACH Energy Australia Pty Ltd
Freehold	2	3	2770	MACH Energy Australia Pty Ltd
Freehold	2	5	2770	MACH Energy Australia Pty Ltd
Freehold	2	6	2770	MACH Energy Australia Pty Ltd
Freehold	2	8	2770	MACH Energy Australia Pty Ltd
Freehold	3	3	2770	MACH Energy Australia Pty Ltd
Freehold	3	5	2770	MACH Energy Australia Pty Ltd
Freehold	3	8	2770	MACH Energy Australia Pty Ltd
Freehold	4	3	2770	MACH Energy Australia Pty Ltd
Freehold	4	4	2770	MACH Energy Australia Pty Ltd
Freehold	4	5	2770	MACH Energy Australia Pty Ltd
Freehold	4	6	2770	MACH Energy Australia Pty Ltd
Freehold	4	8	2770	MACH Energy Australia Pty Ltd
Freehold	5	1	2770	MACH Energy Australia Pty Ltd
Freehold	5	3	2770	MACH Energy Australia Pty Ltd
Freehold	5	4	2770	MACH Energy Australia Pty Ltd
Freehold	5	6	2770	MACH Energy Australia Pty Ltd
Freehold	5	8	2770	MACH Energy Australia Pty Ltd
Freehold	6	1	2770	MACH Energy Australia Pty Ltd
Freehold	6	3	2770	MACH Energy Australia Pty Ltd
Freehold	6	8	2770	MACH Energy Australia Pty Ltd
Freehold	14	8	2770	MACH Energy Australia Pty Ltd
Freehold	17		2770	MACH Energy Australia Pty Ltd
Freehold	1		104563	MACH Energy Australia Pty Ltd
Freehold	2		104563	MACH Energy Australia Pty Ltd
Freehold	1		112742	MACH Energy Australia Pty Ltd
Freehold	2		112742	MACH Energy Australia Pty Ltd
Freehold	3		112742	MACH Energy Australia Pty Ltd
Freehold	5		112742	MACH Energy Australia Pty Ltd
Freehold	12		112742	MACH Energy Australia Pty Ltd
Freehold	13		112742	MACH Energy Australia Pty Ltd
Freehold	14		112742	MACH Energy Australia Pty Ltd
Freehold	15		112742	MACH Energy Australia Pty Ltd
Freehold	16		112742	MACH Energy Australia Pty Ltd
Freehold	17		112742	MACH Energy Australia Pty Ltd
Freehold	18		112742	MACH Energy Australia Pty Ltd
Freehold	19		112742	MACH Energy Australia Pty Ltd
Freehold	20		112742	MACH Energy Australia Pty Ltd
Freehold	1		114090	MACH Energy Australia Pty Ltd
Freehold	2		114090	MACH Energy Australia Pty Ltd
Freehold	30		137297	MACH Energy Australia Pty Ltd
Freehold	A		174071	MACH Energy Australia Pty Ltd
Freehold	B		174071	MACH Energy Australia Pty Ltd
Freehold	1	1	192121	MACH Energy Australia Pty Ltd
Freehold	1	2	192121	MACH Energy Australia Pty Ltd
Freehold	2	2	192121	MACH Energy Australia Pty Ltd

**Table A-1 (continued)**  
**Preliminary Schedule of Lands**

Tenure Type	Lot	Section	Deposited Plan (DP)	Lot Owner/Description
Freehold	3	2	192121	MACH Energy Australia Pty Ltd
Freehold	4	2	192121	MACH Energy Australia Pty Ltd
Freehold	5	2	192121	MACH Energy Australia Pty Ltd
Freehold	6	2	192121	MACH Energy Australia Pty Ltd
Freehold	7	2	192121	MACH Energy Australia Pty Ltd
Freehold	1		194043	MACH Energy Australia Pty Ltd
Freehold	2		194043	MACH Energy Australia Pty Ltd
Freehold	3		194043	MACH Energy Australia Pty Ltd
Freehold	1		213293	MACH Energy Australia Pty Ltd
Freehold	1		254339	MACH Energy Australia Pty Ltd
Freehold	8		255048	MACH Energy Australia Pty Ltd
Freehold	9		255048	MACH Energy Australia Pty Ltd
Freehold	10		255048	MACH Energy Australia Pty Ltd
Freehold	11		255048	MACH Energy Australia Pty Ltd
Freehold	12		255048	MACH Energy Australia Pty Ltd
Freehold	13		255048	MACH Energy Australia Pty Ltd
Freehold	14		255048	MACH Energy Australia Pty Ltd
Freehold	15		255048	MACH Energy Australia Pty Ltd
Freehold	16		255048	MACH Energy Australia Pty Ltd
Freehold	1		312392	MACH Energy Australia Pty Ltd
Freehold	1		318999	MACH Energy Australia Pty Ltd
Freehold	1		401237	MACH Energy Australia Pty Ltd
Freehold	A		432713	MACH Energy Australia Pty Ltd
Freehold	B		432713	MACH Energy Australia Pty Ltd
Freehold	1		544039	MACH Energy Australia Pty Ltd
Freehold	21		554140	MACH Energy Australia Pty Ltd
Freehold	22		554140	MACH Energy Australia Pty Ltd
Freehold	132		558246	MACH Energy Australia Pty Ltd
Freehold	261		561919	MACH Energy Australia Pty Ltd
Freehold	268		567444	MACH Energy Australia Pty Ltd
Freehold	1		629491	MACH Energy Australia Pty Ltd
Freehold	2		629491	MACH Energy Australia Pty Ltd
Freehold	3		629491	MACH Energy Australia Pty Ltd
Freehold	1		634490	MACH Energy Australia Pty Ltd
Freehold	2		634490	MACH Energy Australia Pty Ltd
Freehold	164		635272	MACH Energy Australia Pty Ltd
Freehold	1		706645	MACH Energy Australia Pty Ltd
Freehold	2		706645	MACH Energy Australia Pty Ltd
Freehold	29		731706	MACH Energy Australia Pty Ltd
Freehold	24		742543	MACH Energy Australia Pty Ltd
Freehold	1		744333	MACH Energy Australia Pty Ltd
Freehold	1		745369	MACH Energy Australia Pty Ltd
Freehold	27		745897	MACH Energy Australia Pty Ltd
Freehold	6		749716	MACH Energy Australia Pty Ltd
Freehold	7		749716	MACH Energy Australia Pty Ltd
Freehold	6		750926	MACH Energy Australia Pty Ltd
Freehold	15		750926	MACH Energy Australia Pty Ltd
Freehold	16		750926	MACH Energy Australia Pty Ltd
Freehold	19		750926	MACH Energy Australia Pty Ltd
Freehold	21		750926	MACH Energy Australia Pty Ltd
Freehold	26		750926	MACH Energy Australia Pty Ltd



**Table A-1 (continued)**  
**Preliminary Schedule of Lands**

Tenure Type	Lot	Section	Deposited Plan (DP)	Lot Owner/Description
Freehold	28		750926	MACH Energy Australia Pty Ltd
Freehold	38		750926	MACH Energy Australia Pty Ltd
Freehold	39		750926	MACH Energy Australia Pty Ltd
Freehold	41		750926	MACH Energy Australia Pty Ltd
Freehold	42		750926	MACH Energy Australia Pty Ltd
Freehold	43		750926	MACH Energy Australia Pty Ltd
Freehold	44		750926	MACH Energy Australia Pty Ltd
Freehold	45		750926	MACH Energy Australia Pty Ltd
Freehold	71		750926	MACH Energy Australia Pty Ltd
Freehold	72		750926	MACH Energy Australia Pty Ltd
Freehold	90		750926	MACH Energy Australia Pty Ltd
Freehold	91		750926	MACH Energy Australia Pty Ltd
Freehold	92		750926	MACH Energy Australia Pty Ltd
Freehold	93		750926	MACH Energy Australia Pty Ltd
Freehold	122		750926	MACH Energy Australia Pty Ltd
Freehold	123		750926	MACH Energy Australia Pty Ltd
Freehold	124		750926	MACH Energy Australia Pty Ltd
Freehold	126		750926	MACH Energy Australia Pty Ltd
Freehold	127		750926	MACH Energy Australia Pty Ltd
Freehold	130		750926	MACH Energy Australia Pty Ltd
Freehold	131		750926	MACH Energy Australia Pty Ltd
Freehold	132		750926	MACH Energy Australia Pty Ltd
Freehold	133		750926	MACH Energy Australia Pty Ltd
Freehold	135		750926	MACH Energy Australia Pty Ltd
Freehold	143		750926	MACH Energy Australia Pty Ltd
Freehold	146		750926	MACH Energy Australia Pty Ltd
Freehold	149		750926	MACH Energy Australia Pty Ltd
Freehold	150		750926	MACH Energy Australia Pty Ltd
Freehold	151		750926	MACH Energy Australia Pty Ltd
Freehold	177		750926	MACH Energy Australia Pty Ltd
Freehold	181		750926	MACH Energy Australia Pty Ltd
Freehold	184		750926	MACH Energy Australia Pty Ltd
Freehold	188		750926	MACH Energy Australia Pty Ltd
Freehold	189		750926	MACH Energy Australia Pty Ltd
Freehold	190		750926	MACH Energy Australia Pty Ltd
Freehold	193		750926	MACH Energy Australia Pty Ltd
Freehold	195		750926	MACH Energy Australia Pty Ltd
Freehold	196		750926	MACH Energy Australia Pty Ltd
Freehold	199		750926	MACH Energy Australia Pty Ltd
Freehold	211		750926	MACH Energy Australia Pty Ltd
Freehold	212		750926	MACH Energy Australia Pty Ltd
Freehold	213		750926	MACH Energy Australia Pty Ltd
Freehold	214		750926	MACH Energy Australia Pty Ltd
Freehold	215		750926	MACH Energy Australia Pty Ltd
Freehold	216		750926	MACH Energy Australia Pty Ltd
Freehold	217		750926	MACH Energy Australia Pty Ltd
Freehold	218		750926	MACH Energy Australia Pty Ltd
Freehold	219		750926	MACH Energy Australia Pty Ltd
Freehold	220		750926	MACH Energy Australia Pty Ltd
Freehold	221		750926	MACH Energy Australia Pty Ltd
Freehold	224		750926	MACH Energy Australia Pty Ltd

**Table A-1 (continued)**  
**Preliminary Schedule of Lands**

Tenure Type	Lot	Section	Deposited Plan (DP)	Lot Owner/Description
Freehold	236		750926	MACH Energy Australia Pty Ltd
Freehold	237		750926	MACH Energy Australia Pty Ltd
Freehold	238		750926	MACH Energy Australia Pty Ltd
Freehold	239		750926	MACH Energy Australia Pty Ltd
Freehold	240		750926	MACH Energy Australia Pty Ltd
Freehold	241		750926	MACH Energy Australia Pty Ltd
Freehold	242		750926	MACH Energy Australia Pty Ltd
Freehold	251		750926	MACH Energy Australia Pty Ltd
Freehold	253		750926	MACH Energy Australia Pty Ltd
Freehold	254		750926	MACH Energy Australia Pty Ltd
Freehold	256		750926	MACH Energy Australia Pty Ltd
Freehold	258		750926	MACH Energy Australia Pty Ltd
Freehold	259		750926	MACH Energy Australia Pty Ltd
Freehold	260		750926	MACH Energy Australia Pty Ltd
Freehold	261		750926	MACH Energy Australia Pty Ltd
Freehold	262		750926	MACH Energy Australia Pty Ltd
Freehold	263		750926	MACH Energy Australia Pty Ltd
Freehold	264		750926	MACH Energy Australia Pty Ltd
Freehold	265		750926	MACH Energy Australia Pty Ltd
Freehold	268		750926	MACH Energy Australia Pty Ltd
Freehold	269		750926	MACH Energy Australia Pty Ltd
Freehold	270		750926	MACH Energy Australia Pty Ltd
Freehold	271		750926	MACH Energy Australia Pty Ltd
Freehold	272		750926	MACH Energy Australia Pty Ltd
Freehold	273		750926	MACH Energy Australia Pty Ltd
Freehold	274		750926	MACH Energy Australia Pty Ltd
Freehold	275		750926	MACH Energy Australia Pty Ltd
Freehold	276		750926	MACH Energy Australia Pty Ltd
Freehold	278		750926	MACH Energy Australia Pty Ltd
Freehold	279		750926	MACH Energy Australia Pty Ltd
Freehold	280		750926	MACH Energy Australia Pty Ltd
Freehold	282		750926	MACH Energy Australia Pty Ltd
Freehold	3	28	758554	MACH Energy Australia Pty Ltd
Freehold	4	28	758554	MACH Energy Australia Pty Ltd
Freehold	4	29	758554	MACH Energy Australia Pty Ltd
Freehold	5	28	758554	MACH Energy Australia Pty Ltd
Freehold	6	28	758554	MACH Energy Australia Pty Ltd
Freehold	8		770911	MACH Energy Australia Pty Ltd
Freehold	1		780673	MACH Energy Australia Pty Ltd
Freehold	2		780673	MACH Energy Australia Pty Ltd
Freehold	1		791576	MACH Energy Australia Pty Ltd
Freehold	2		791576	MACH Energy Australia Pty Ltd
Freehold	3		791576	MACH Energy Australia Pty Ltd
Freehold	2		801249	MACH Energy Australia Pty Ltd
Freehold	4		801249	MACH Energy Australia Pty Ltd
Freehold	5		801249	MACH Energy Australia Pty Ltd
Freehold	50		809718	MACH Energy Australia Pty Ltd
Freehold	51		809718	MACH Energy Australia Pty Ltd
Freehold	6		821183	MACH Energy Australia Pty Ltd
Freehold	7		821183	MACH Energy Australia Pty Ltd
Freehold	1		905281	MACH Energy Australia Pty Ltd

**Table A-1 (continued)**  
**Preliminary Schedule of Lands**

Tenure Type	Lot	Section	Deposited Plan (DP)	Lot Owner/Description
Freehold	1		906668	MACH Energy Australia Pty Ltd
Freehold	1		915913	MACH Energy Australia Pty Ltd
Freehold	2		915913	MACH Energy Australia Pty Ltd
Freehold	1		944232	MACH Energy Australia Pty Ltd
Freehold	1		998239	MACH Energy Australia Pty Ltd
Freehold	2		998239	MACH Energy Australia Pty Ltd
Freehold	3		998239	MACH Energy Australia Pty Ltd
Freehold	3		998477	MACH Energy Australia Pty Ltd
Freehold	22		1041946	MACH Energy Australia Pty Ltd
Freehold	23		1041946	MACH Energy Australia Pty Ltd
Freehold	25		1053537	MACH Energy Australia Pty Ltd
Freehold	35		1076510	MACH Energy Australia Pty Ltd
Freehold	1		1080962	MACH Energy Australia Pty Ltd
Freehold	1		1081385	MACH Energy Australia Pty Ltd
Freehold	2		1081385	MACH Energy Australia Pty Ltd
Freehold	147		1083411	MACH Energy Australia Pty Ltd
Freehold	1		1100374	MACH Energy Australia Pty Ltd
Freehold	36		1108421	MACH Energy Australia Pty Ltd
Freehold	12		1112792	MACH Energy Australia Pty Ltd
Freehold	13		1112792	MACH Energy Australia Pty Ltd
Freehold	14		1112792	MACH Energy Australia Pty Ltd
Freehold	15		1112792	MACH Energy Australia Pty Ltd
Freehold	16		1112792	MACH Energy Australia Pty Ltd
Freehold	144		1120266	MACH Energy Australia Pty Ltd
Freehold	145		1120266	MACH Energy Australia Pty Ltd
Freehold	1		1137590	MACH Energy Australia Pty Ltd
Freehold	10		1184928	MACH Energy Australia Pty Ltd
Freehold	1		1199733	MACH Energy Australia Pty Ltd
Freehold	3		1199733	MACH Energy Australia Pty Ltd
Freehold	4		1199733	MACH Energy Australia Pty Ltd
Freehold	5		1199733	MACH Energy Australia Pty Ltd
Freehold	6		1199733	MACH Energy Australia Pty Ltd
Freehold	7		1199733	MACH Energy Australia Pty Ltd
Freehold	8		1199733	MACH Energy Australia Pty Ltd
Freehold	9		1199733	MACH Energy Australia Pty Ltd
Freehold	10		1199733	MACH Energy Australia Pty Ltd
Freehold	2		1234475	MACH Energy Australia Pty Ltd
Freehold	3		1234475	MACH Energy Australia Pty Ltd
Freehold	4		1234475	MACH Energy Australia Pty Ltd
Freehold	5		1234475	MACH Energy Australia Pty Ltd
Freehold	6		1234475	MACH Energy Australia Pty Ltd
Freehold	7		1234475	MACH Energy Australia Pty Ltd
Freehold	1006		1235827	MACH Energy Australia Pty Ltd
Freehold	7		112742	AQC Dartbrook Management Pty Ltd
Freehold	11		112742	AQC Dartbrook Pty Ltd
Freehold	1453		628493	AQC Dartbrook Pty Ltd
Freehold	12		659924	AQC Dartbrook Pty Ltd
Freehold	13		750926	AQC Dartbrook Pty Ltd
Freehold	1		911212	AQC Dartbrook Pty Ltd
Freehold	11		1051153	AQC Dartbrook Pty Ltd
Freehold	123		700578	Bengalla Mining Company Pty Limited



**Table A-1 (continued)**  
**Preliminary Schedule of Lands**

Tenure Type	Lot	Section	Deposited Plan (DP)	Lot Owner/Description
Freehold	124		700578	Bengalla Mining Company Pty Limited
Road	11		1072668	Bengalla Road
Road	12		1072668	Bengalla Road
Road	19		1072668	Bengalla Road
Road	100		1148907	Bengalla Road
Freehold	1		742324	Bruce Leonard Bates, Mary Llewellyn Bates
State Rail Authority (Crown)	1031		1164040	Country Rail Infrastructure Authority
State Rail Authority (Crown)	3		1170997	Country Rail Infrastructure Authority
State Rail Authority (Crown)	4		1170997	Country Rail Infrastructure Authority
State Rail Authority (Crown)	5		1170997	Country Rail Infrastructure Authority
Crown	1		904885	Crown Land
Freehold	20		747226	Dapkos Pty. Limited
Freehold	2	4	2770	Gavin Michael Casey
Freehold	94		665393	Gavin Michael Casey
Freehold	86		750926	Gavin Michael Casey
Freehold	152		750926	Gavin Michael Casey
Freehold	153		750926	Gavin Michael Casey
Freehold	154		750926	Gavin Michael Casey
Freehold	7		784436	Jabetin Pty. Limited
Freehold	3	1	2770	James Stephen Lonergan
Freehold	1	1	2770	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	1	2	2770	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	4	1	2770	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	4	2	2770	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	9		750926	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	10		750926	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	73		750926	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	74		750926	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	200		750926	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	22		870608	James Stephen Lonergan, Nellie Maria Lonergan
Freehold	1		655691	Jonathan Buchanan Moore
Freehold	3		1183514	Jonathan Buchanan Moore
Freehold	269		567444	Kerrie Maree Lee
Freehold	3	29	758554	Maxwell John Adnum, Robert George Adnum
Freehold	7		236668	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	641		554159	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	91		620639	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	71		626353	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	72		626353	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	505		711996	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	2		997931	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	1		1072667	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	20		1072668	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited

**Table A-1 (continued)**  
**Preliminary Schedule of Lands**

Tenure Type	Lot	Section	Deposited Plan (DP)	Lot Owner/Description
Freehold	101		1148907	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	102		1148907	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	103		1148907	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	104		1148907	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	105		1148907	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	106		1148907	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	7		1170997	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	8		1170997	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	11		1184928	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	1007		1235827	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	1008		1235827	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	1009		1235827	Mitsui Bengalla Investment Pty Ltd, New Hope Bengalla Pty Ltd, Taipower Bengalla Pty Limited, Wesfarmers Bengalla Limited
Freehold	100		1177385	Muswellbrook Shire Council
State Rail Authority (Crown)	1		189134	State Rail Authority of New South Wales
State Rail Authority (Crown)	1		1129338	The Commissioner for Railways
Crown	7001		93329	The State of New South Wales
Crown	7304		1146786	The State of New South Wales
Crown	90		1215947	The State of New South Wales
Freehold (residue in title)	1		745369	John Frederick Doyle
Freehold (residue in title)	22		1041946	James Cobb White
Freehold (residue in title)	23		1041946	James Cobb White
Freehold (residue in title)	1	4	2770	James William George Cox, Charles Hobart Cox, Georgina Maria Cox, Emily Matilda Cox, Rebecca Jane Cox, Francis Arthur Cox, Henry Hunter Cox, James Stephen Cox and Conrade Clement Cox
Freehold (residue in title)	27		745897	James Cobb White
Road				Belgrave Rd
Road				Bengalla Rd
Road				Castlerock Rd
Road				Coal Creek Rd
Road				Skippens Lane
Road				Dorset Rd
Road				Invermein St
Road				Kayuga Rd
Road				Lawries Lane
Road				Logues Lane
Road				Overton Rd
Road				Rosebrook Lane
Road				Roxburgh Rd 30667 - 1603 R
Road				Scone St
Road				Wiltons Lane
Road				Wybong Rd
Crown Water Course				Hunter River

**Table A-1 (continued)**  
**Preliminary Schedule of Lands**

Tenure Type	Lot	Section	Deposited Plan (DP)	Lot Owner/Description
State Rail Authority (Crown)				Muswellbrook Merriwa Railway
State Rail Authority (Crown)				Railway Lands Located Within, Between or Adjacent to The Above Parcels of Land
Muswellbrook Council or Department of Lands (Crown)				Various Council and Crown Public and Unformed Roads Located Within, Between or Adjacent to the Above Parcels of Land
Freehold				Any Unidentified Historical Title Residues Located Within, Between or Adjacent to The Above Parcels of Land
Crown				Creeks or Streams Located Within, Between or Adjacent to the Above Parcels of Land
Crown				Any Unidentified Crown Land or Crown Land Historical Title Residues Located Within, Between or Adjacent to the Above Parcels of Land





# MACHEnergy

Mount Pleasant Operation

A JOINT VENTURE WITH  
**JODA**  
Japan Coal Development Australia

## Attachment B

Key Outputs of the Scoping Worksheet

Project : Mount Pleasant Optimisation Project							
MATTERS		IMPACTS		ASSESSMENT LEVEL	CUMULATIVE IMPACTS	COMMUNITY ISSUES	ASSESSMENT APPROACH
Potential matters that could be affected by the project		Is the project (without mitigation) likely to cause an impact?	Are the impacts (without mitigation) likely to be significant based on the magnitude of the impacts and/or sensitivity of receivers?	What level of assessment is required to assess impacts and determine mitigation measures?	Will cumulative assessment be required?	Did the community raise any concerns about the impacts?	Indicative approach to assessment in EIS
Group	Specific	Impact?	Significant Impact?	Assessment Level	Cumulative Impact?	Concerns?	Category
ACCESS	access to property	Yes	Unlikely			Yes	Scoping Report with focussed engagement
	parking	Yes	Unlikely			Yes	Scoping Report with focussed engagement
	port / airport facilities	Yes	Unlikely			No	Scoping Report
	road / rail network	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
AIR	atmospheric emissions	Yes	Likely	Standard	Yes	Yes	Standard Assessment and CIA with focussed engagement
	gases	No				No	None (include short explanation in Scoping Report)
	particulate matter	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
AMENITY	noise	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	odour	No				No	None (include short explanation in Scoping Report)
	vibration	Yes	Likely	Detailed	No	Yes	Detailed Assessment with focussed engagement
	visual	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
BIODIVERSITY	conservation areas	No				No	None (include short explanation in Scoping Report)
	native vegetation	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	native fauna	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
BUILT ENVIRONMENT	private property	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	public domain	Yes	Unlikely			No	Scoping Report
	public infrastructure	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
ECONOMIC	livelihood	Yes	Likely	Detailed	No	Yes	Detailed Assessment with focussed engagement
	natural resource use	Yes	Likely	Detailed	No	No	Detailed Assessment
	opportunity cost	Yes	Likely	Detailed	No	Yes	Detailed Assessment with focussed engagement
HAZARDS & RISKS	biosecurity	No				No	None (include short explanation in Scoping Report)
	bush fire	Yes	Likely	Standard	No	Yes	Standard Assessment with focussed engagement
	coastal hazards	N/A					None (include short explanation in Scoping Report)
	dams	Yes	Likely	Standard	No	Yes	Standard Assessment with focussed engagement
	dangerous goods	Yes	Likely	Standard	No	No	Standard Assessment
	environmental hazards	Yes	Unknown	Standard	No	No	Standard Assessment
	floods	No				No	None (include short explanation in Scoping Report)
	groundwater contamination	Yes	Likely	Standard	Yes	Yes	Standard Assessment and CIA with focussed engagement
	hazardous / offensive development	Yes	Likely	Standard	No	No	Standard Assessment
	land contamination	Yes	Likely	Standard	No	No	Standard Assessment
	land movement	Yes	Likely	Standard	No	No	Standard Assessment
	waste	Yes	Unlikely			No	Scoping Report
HERITAGE	Aboriginal cultural	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	historic	Yes	Likely	Detailed	No	No	Detailed Assessment
	natural	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
LAND	land capability	Yes	Likely	Detailed	No	No	Detailed Assessment
	soil chemistry	Yes	Likely	Detailed	No	Yes	Detailed Assessment with focussed engagement
	stability / structure	Yes	Likely	Detailed	No	No	Detailed Assessment
	topography	Yes	Likely	Detailed	No	Yes	Detailed Assessment with focussed engagement
SOCIAL	community services / facilities	Yes	Unknown	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	health	Yes	Unknown	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	housing availability	Yes	Unknown	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	safety	No				No	None (include short explanation in Scoping Report)
	social cohesion	Yes	Unknown	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
WATER	ground water quality	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	hydrological flows (including flooding)	Yes	Likely	Detailed	Yes	No	Detailed Assessment and CIA
	surface water quality	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement
	water availability	Yes	Likely	Detailed	Yes	Yes	Detailed Assessment and CIA with focussed engagement



# MACHEnergy

Mount Pleasant Operation

A JOINT VENTURE WITH  
**JODA**  
Japan Coal Development Australia

## Attachment C

Social Impact Assessment Scoping Report



**ATTACHMENT C**

**SOCIAL IMPACT ASSESSMENT  
SCOPING REPORT**

Please refer to separate document

**MACH**Energy

**Mount Pleasant Operation**

A JOINT VENTURE WITH

**JODA**  
Japan Coal Development Australia

# MACHEnergy

Mount Pleasant Operation

A JOINT VENTURE WITH  
**JODA**  
Japan Coal Development Australia



<http://machenergyaustralia.com.au>