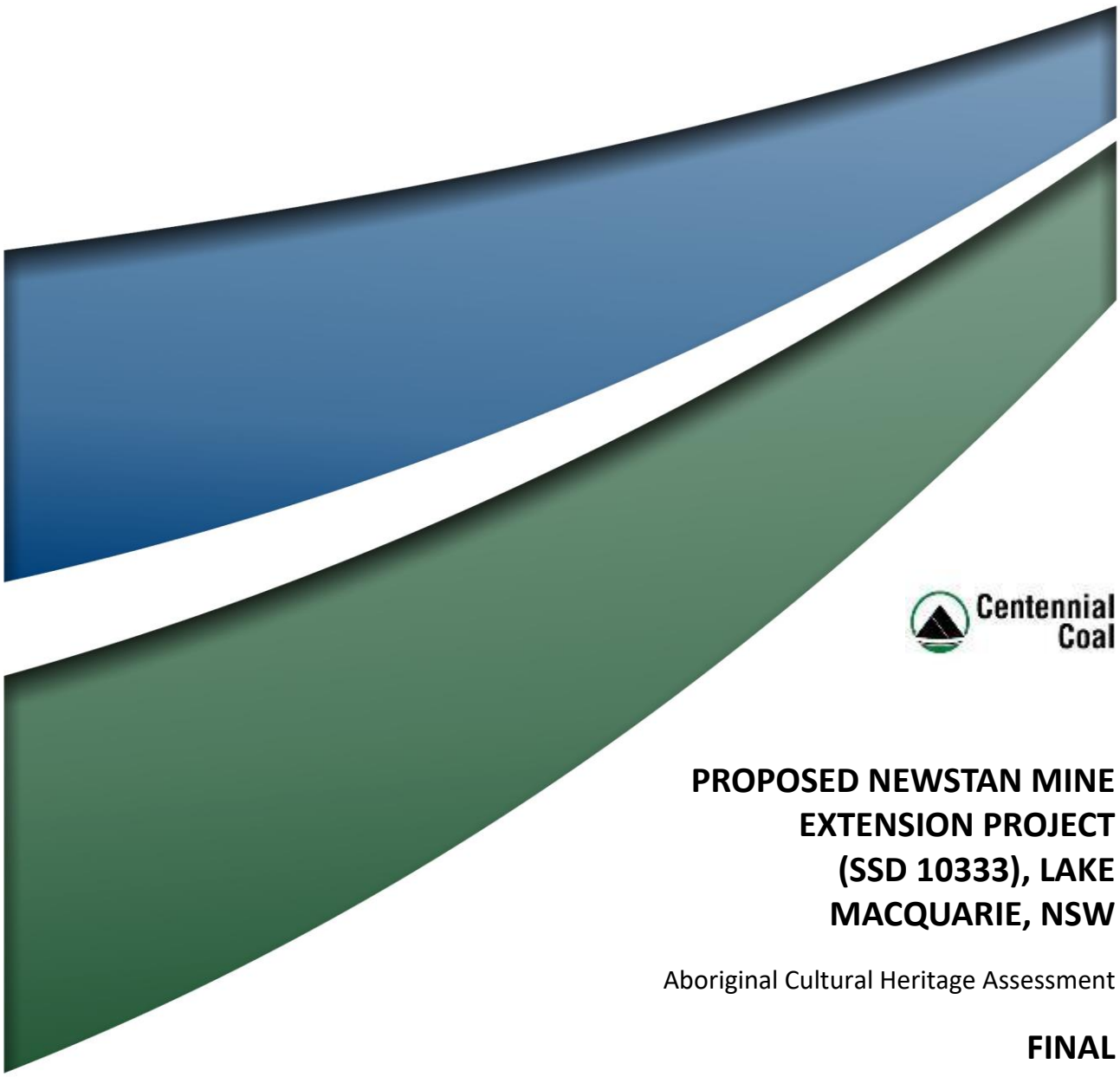
Appendix S – Aboriginal heritage impact assessment

umwelt
Environmental & Social Consultants



Centennial Coal

PROPOSED NEWSTAN MINE EXTENSION PROJECT (SSD 10333), LAKE MACQUARIE, NSW

Aboriginal Cultural Heritage Assessment

FINAL

March 2020

PROPOSED NEWSTAN MINE EXTENSION PROJECT (SSD 10333), LAKE MACQUARIE, NSW

Aboriginal Cultural Heritage Assessment

FINAL

Prepared by
Umwelt Environmental and Social Consultants
on behalf of
Centennial Coal Company Limited

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Report No.	4660/R01
Date:	March 2020

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Document Status

Rev No.	Reviewer		Approved for Issue	
	Name	Date	Name	Date
Final	Nicola Roche	05/03/2020	Nicola Roche	05/03/2020

Acknowledgement

Umwelt Environmental and Social Consultants (Umwelt) would like to acknowledge the Awabakal people who are the traditional custodians of the Lake Macquarie/Awaba area and pay our respects to their cultural heritage, beliefs and continuing relationship with the land.

We pay our respects to the Elders- past, present and future- for they hold the memories, traditions, culture and hopes of Aboriginal people in the area.

Statements of Aboriginal Cultural Significance

The following statement of significance was received on behalf of the Awabakal Traditional Owners Aboriginal Corporation, Awabakal Descendants Traditional Owners Aboriginal Corporation and Awabakal & Guringai (formerly Guringai Tribal Link Aboriginal Corporation).

Statement of Significance of the area to the
Awabakal and Guringai Traditional Owners

The Awabakal and Guringai is one of the 600 or more language groups or 'nations' that existed across Australia at the time of European contact and are part of the oldest and continuous living culture in human history. The Awabakal and Guringai presence within the Lake Macquarie Region extends from the present day back many thousands of years and is reflected in both tangible and intangible aspects of Aboriginal culture and history. Past survey and assessment within the Lake Macquarie Region has identified Aboriginal Cultural Heritage Sites (the tangible evidence of occupation) and landscape features of cultural value embedded within a landscape that provided physical and spiritual sustenance (often intangible aspects) to the Awabakal and Guringai and those Aboriginal People they invited into their Country.

The Awabakal and Guringai people also have a continuing, contemporary history of trying to protect and preserve the Lake Macquarie Region. They maintain concerns over Development licences being approved in the region and the adverse impacts this has on their cultural values and landscape features and footprints of their ancestors which are being impacted through cumulative and overlapping development activity and unmonitored and unmanaged human recreational activity.

As indicated by the statements provided by the Awabakal and Guringai peoples within the document, the mental, physical and spiritual wellbeing of the Awabakal and Guringai People and those Aboriginal Peoples that feel a connection to this landscape is a contemporary phenomenon and not just 'a thing of the past'.
The Lake Macquarie Region contains a plethora of registered Aboriginal cultural heritage sites identified as having Aboriginal cultural value and significance. The sites and landscape features link contemporary Awabakal and Guringai People with generations of their ancestors and are extremely important teaching places and places of spiritual renewal.

Although the impact of European invasion dramatically changed Aboriginal life in Australia forever, the recent history of the Lake Macquarie Region is also characterised by the cultural resilience of Aboriginal Peoples, for both those who have retained connection to Country and those that are reconnecting to Country. Recent history is also characterised by the movement of other Aboriginal Peoples into the Country of the Awabakal and Guringai and the development of their own more recent attachments to the area. Whilst a diversity of attachment and experience is recognised, it is also recognised that the landscape, vegetation and watercourses of the Lake Macquarie Region form part of an Aboriginal cultural landscape of traditional and contemporary cultural and spiritual value to many Aboriginal People.

Aboriginal lore requires that the Aboriginal cultural landscape (which includes Aboriginal heritage sites, landscape features of cultural value, the plants, animals and water) of the Lake Macquarie Region is cared for so that it will survive for future generations of our Peoples.

The custodial rights and obligations of Aboriginal people for Caring for Country underpin the principles of this document. It is highlighted, however, that the Awabakal and Guringai peoples in no way support any impact to Aboriginal sites, landscape features of Aboriginal cultural value or any aspect of the natural environment within the Lake Macquarie Region. Aboriginal people inherit the right and obligation to Care for Country, and endorsing any form of harm is assessed as culturally and ethically inappropriate." (Awabakal Traditional Owners Aboriginal Corporation, Awabakal Descendants Traditional Owners Aboriginal Corporation and Guringai Tribal Link Aboriginal Corporation March 2010).

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1.0 Introduction

Centennial Newstan Pty Ltd (Centennial Newstan) owns and operates Newstan Colliery and is seeking approval for the continuation of mining within the West Borehole seam. This project, the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen-year period. The Newstan Mine Extension Project has been classed as a State Significant Development (SSD).

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Newstan to prepare an Aboriginal Cultural Heritage Assessment (ACHA) which will form part of the Environmental Impact Statement (EIS) for the project. This assessment has been prepared in accordance with Clause 61 of the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011), with all consultation undertaken in accordance with Clause 60 of NPW Regulation and the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010a) (the consultation requirements), as documented in **Appendix 1**. The ACHA incorporates required archaeological technical information in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010c) (the Code of Practice). The completion of this assessment is intended to address the requirements established in the Planning Secretary's Environmental Assessment Requirements (SEARs) issued 3 September 2019, which state that the Environmental Impact Statement for the project must include 'an assessment of the potential impacts of the development on Aboriginal heritage (cultural and archaeological), including consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage.'

Within the draft report supplied to the registered Aboriginal parties for review and comment, Umwelt documented the outcomes of all consultation undertaken with registered Aboriginal parties to date but it was emphasised that the registered Aboriginal parties have primary responsibility for assessing the cultural significance of the lands for which they are traditional custodians and/or to which they have contemporary connection. *Summary of comments received from the Aboriginal parties will be provided here.*

1.1 Project Description

1.1.1 Project background

Newstan Colliery is an existing underground coal mine located in the Lake Macquarie Local Government Area (LGA), approximately 25 kilometres (km) south-west of Newcastle and 140 km north of Sydney, NSW. It is owned and operated by Centennial Newstan Pty Ltd (Centennial Newstan).

Mining operations at Newstan Colliery began in 1887 and upon the introduction of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) operated pursuant to continuing use rights in accordance with Part 4, Division 10 of the EP&A Act (continuing use rights).

Newstan Colliery has at various times mined the upper coal seams (Great Northern and Fassifern seams) and lower coal seams (West Borehole, Borehole, Young Wallsend and Yard seams) and produced both semi-soft coking coal and thermal coal for the domestic and export markets. In the lower seams, workings to date have been concentrated to the west of the seam split, which is a defining geological feature of the mine. Mining has been undertaken using a combination of bord and pillar and longwall mining.

In August 2014, the underground operations at Newstan Colliery were placed onto care and maintenance due to poor market conditions. In recent years, Centennial Newstan has commenced feasibility investigations into the recommencement of mining at Newstan Colliery. The most recent modification to DA 73-11-98 in January 2019, permits first workings mining within the West Borehole seam in the southern portion of the Newstan Colliery mining lease area. The first workings aim to improve Centennial Newstan's understanding of the geology within the West Borehole seam, including the presence, throw and strike of a major fault zone projected from the historic Newstan workings.

Centennial Newstan is now seeking approval for the continuation of mining within the West Borehole seam. The Newstan Mine Extension Project proposes to extract up to 25.9 Mt over a fifteen-year period at a maximum production rate of 4 million tonnes per annum (Mtpa) of Run of Mine (ROM) coal. Bord and pillar mining is proposed using continuous miner methods that will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal is proposed to be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. Once the coal reaches the Newstan Colliery Surface Site it will be handled in accordance with the approved operations for the Northern Coal Logistics Project (SSD-5145), managed by Centennial Coal's Northern Coal Services business unit.

1.1.2 Project components

A summary of works associated with the project that will or may result in ground surface/sub-surface disturbance within the Project Area are provided below, which are further detailed in the EIS.

Key features of the project include:

- Utilisation of the Newstan Colliery Surface Site to provide parking, bathhouse, administration and workshop facilities for the underground workforce. A small number of administrative, maintenance and monitoring personnel will also be located at Awaba Colliery Surface Site.
- Transportation of personnel and materials to and from the underground mining area via the existing men and materials drift at Newstan Colliery Surface Site.
- Continued operation of the two existing ventilation fans at Newstan Colliery Surface Site and the installation and operation of three new ventilation fans at the existing ventilation shaft at Awaba Colliery Surface Site.
- In-seam gas drainage, with gas transferred to a new gas flaring facility to be located within the existing disturbance footprint of Awaba Colliery Surface Site.
- Extraction of underground water via the existing Fassifern Pump Station at Newstan Colliery Surface Site and ongoing groundwater management in accordance with Centennial Coal's Northern Operations Water Management Plan.

The project is aligned with the broader Centennial Coal business strategy in that it facilitates the development of a new semi-soft coking coal product stream and a thermal coal product for both the domestic and export markets. The project will enable supply of export coal products while meeting contractual coal supplies to the domestic markets. Over time, the project can potentially replace the coal product currently supplied to the domestic market by other Centennial operations as these other resources become depleted. This will ensure ongoing security of supply for domestic electricity generation.

For the purposes of this ACHA, the Project Area comprises three distinct areas - the Newstan Colliery Surface Site, the proposed Extension of Mining Area (including the Awaba Colliery Surface Site), and the Forest Road Ballast Borehole and Services Site. The Project Area comprises a smaller portion of and falls entirely within the larger Centennial Newstan Mine Project Application Area, which can be seen in **Figure 1.1.**

1.2 Objectives of this Assessment

The primary objective of this ACHA is to ensure that the Aboriginal cultural values of the Project Area are appropriately documented and assessed with reference to the approach specified in the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*, the consultation requirements and with the Code of Practice.

Aboriginal people are the primary determinants of the cultural significance of their heritage. This ACHA is prepared to ensure that the information provided by registered Aboriginal parties is documented and presented in a manner that informs decision making on the management of Aboriginal cultural heritage within the Project Area, whilst ensuring that the required archaeological information is also appropriately documented.

1.3 Project Team and Report Authors

All Aboriginal cultural input for this report has been provided by the registered Aboriginal parties and their representatives, through the consultation process outlined in **Section 3**.

Jessica Blackman (Senior Archaeologist) prepared this ACHA as the primary author, with assistance from Karyn Virgin (Senior Archaeologist). Nicola Roche (Manager, Cultural Heritage) reviewed the report, and additional support was given by the Umwelt drafting and admin teams.

1.4 Secretary's Environmental Assessment Requirements

As noted above, the project is designated as SSD, which requires approval under Part 4 of the EP&A Act. The SEARs were requested from the Secretary of the DPIE for the preparation of the EIS and these were provided on 3 September 2019. The SEARs include provision for heritage assessment, for which the compliance checklist is provided below in **Table 1.1.**

Table 1.1 SEARs Requirements

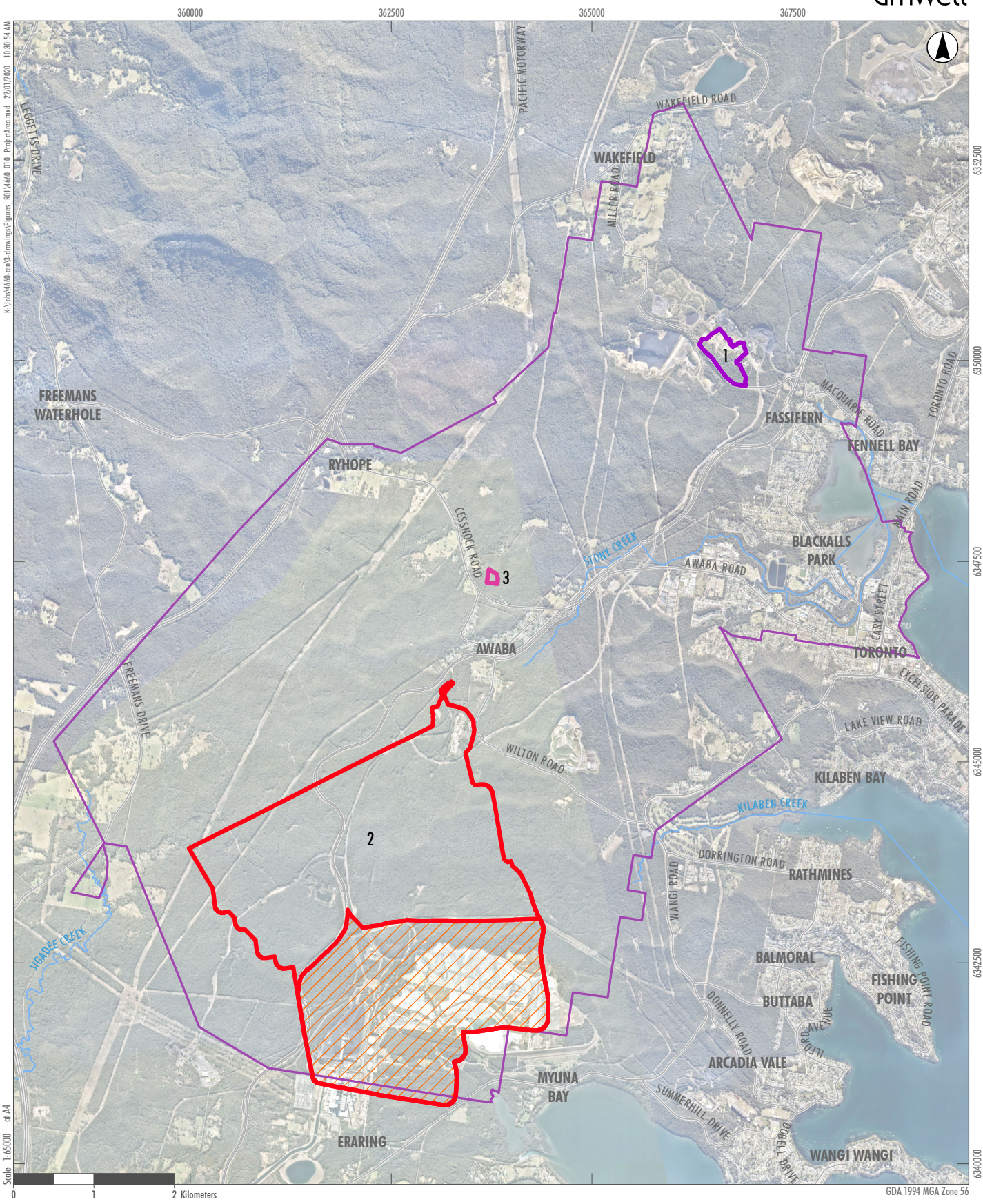
Requirement	Section
An assessment of the potential impacts of the development on Aboriginal heritage (cultural and archaeological), including consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage	Provided in Section 7.11 of EIS
Identification of historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items.	Provided in a separate historic heritage assessment (HHA)- addressed in Section 7.12 of EIS

1.4.1 Report Structure

This report addresses the key issues outlined above. **Table 1.2** summarises the required components of an ACHA and refers to the section of this document in which they are addressed.

Table 1.2 Required Components of The Assessment

Required Information (Aboriginal archaeological and cultural heritage assessment)	Relevant Section
Provides a summary of the project	Section 1
Outlines the relevant legislation and statutory context followed for this assessment	Section 2
Provides a summary of the Aboriginal community consultation undertaken in accordance with the relevant legislative requirements	Section 3
Summarises the environmental context of the Project Area	Section 4
Summarises the Aboriginal cultural heritage context of the Project Area and the wider region	Section 5
Documents the survey of the Project Area	Section 6
Provides an assessment of significance for the Project Area	Section 7
Reviews the likely impact of the proposed expansion of mining	Section 8
Summarises the various mitigation and management measures possible for this project	Section 9
Provides the recommendations for the management of cultural heritage in association with the proposed expansion of mining	Section 10
References used	Section 11
Appendix 1 – Community consultation	
Appendix 2 – ILUA Information	
Appendix 3 – Results of AHIMS Search	



Legend

Project Area

- 1 - Newstan Colliery Surface Site
- 2 - Extension of Mining Area
- 3 - Forest Road Ballast Borehole and Services Site
- Unassessed Area
- Newstan Mine Project Application Area

FIGURE 1.1

Project Area

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

2.0 Legislative Context

The management and conservation of heritage is subject to a range of statutory provisions under NSW legislation. In NSW, Aboriginal archaeological remains and heritage items are afforded statutory protection under the following Acts:

- The *National Parks and Wildlife Act 1974* (the NPW Act)
- The *Environmental Planning and Assessment Act 1979* (the EP&A Act).

2.1 Environmental Planning and Assessment Act 1979

The EP&A Act regulates development activity in NSW. The project has been designated as SSD in accordance with the provisions of the EP&A Act. As stated, the project is the subject of SEARs issued 3 September 2019 which establish the assessment requirements. This assessment is prepared to address these requirements.

It is noted that Division 4.41 (d) of the EP&A Act specifies that it is not necessary to obtain an Aboriginal heritage impact permit (AHIP) under Section 90 of the NPW Act (refer to **Section 2.2**) for designated State Significant Development. Projects approved as State Significant Development under the EP&A Act are subject to conditions of approval issued by the Department of Planning, Industry and Environment (DPIE) and (where relevant) Aboriginal cultural heritage is addressed by appropriate conditions.

2.2 National Parks and Wildlife Act 1974

The Department of Planning, Industry and Environment (DPIE, formerly the Office of Environment and Heritage -OEH) is primarily responsible for regulating the management of Aboriginal cultural heritage in New South Wales under the *National Parks and Wildlife Act 1974* (NPW Act). The NPW Act is accompanied by the *National Parks and Wildlife Regulation 2019* (the Regulation) and a range of codes and guides including the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011), the consultation requirements and the Code of Practice.

The NPW Act defines an Aboriginal object as:

> *..any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales.*

Under Section 84 of the NPW Act, an Aboriginal Place must be declared by the Minister as a place that, in the opinion of the Minister, is or was of special significance with respect to Aboriginal culture. Section 86(4) of the NPW Act states that a person must not harm or desecrate an Aboriginal place.

In accordance with Section 86(1) of the NPW Act, it is an offence to harm or desecrate a known Aboriginal object, whilst it is also an offence to harm an Aboriginal object under Section 86(2). Harm to an object or place is defined as any act or omission that:

- *destroys, defaces or damages an object or place, or*
- *in relation to an object – moves the object from the land on which it had been situated, or*
- *is specified by the regulations, or*

- *causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c),*

but does not include any act or omission that:

- *desecrates the object or place (noting that desecration constitutes a separate offence to harm), or*
- *is trivial or negligible, or*
- *is excluded from this definition by the regulations.*

Section 87(1) of the NPW Act specifies that it is a defence to prosecution under Section 86(1) and Section 86(2) if the harm or desecration of an Aboriginal object was authorised by an AHIP and the activities were carried out in accordance with that AHIP. As discussed above, there is no requirement to obtain an AHIP for projects designated as State Significant Development.

2.3 Other Relevant Legislation

2.3.1 Native Title Act 1993 (Cwth)

The *Native Title Act 1993* (NT Act) recognises that Aboriginal people have rights and interests to land and waters which derive from their traditional laws and customs. Native Title may be recognised in places where Indigenous people continue to follow their traditional laws and customs and have maintained a link with their traditional country. It can be negotiated through a Native Title Claim, Indigenous Land Use Agreement (ILUA) or future Act agreements.

An ILUA is an agreement between a native title group and other parties who use or manage the land and waters. The ILUA process allows for negotiation between indigenous groups and other parties over the use and management of land and water resources, and the ability to establish a formal agreement. An ILUA is binding once is has been registered on the Native Title Tribunal's Register of Indigenous Land Use Agreements.

Most of the land within the Project Application Area (refer to **Figure 1.1**) is subject to an ILUA that was entered into on 28 May 1999 by the Wonnarua people (Wonnarua Nation Aboriginal Corporation) and Powercoal Pty Ltd (since acquired by Centennial Coal). As such, Centennial Coal is bound by the terms of the ILUA, which are set out in the Master Deed, in the use and management of the subject land. Clause 7 of the Master Deed outlines Centennial Coal's obligations, including provisions for compliance with an Aboriginal Heritage Protection Protocol (Clause 7.2 and Schedule 5). **Appendix 2** contains the details of this ILUA, including the lands covered in the Agreement.

3.0 Aboriginal Party Consultation

Consultation with Aboriginal parties is an integral part of the identification and assessment of the significance of Aboriginal objects/places and determining and implementing appropriate strategies to mitigate impacts to Aboriginal heritage.

In accordance with current requirements and expectations, consultation with Aboriginal parties regarding the proposed Newstan Mine Expansion Project was undertaken with Aboriginal parties in accordance with the relevant aspects of Part 8A, Clause 80C of the Regulation (now Part 5, Division 2 Clause 60) and the *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010a). A detailed log of all Aboriginal party consultation and correspondence is included in **Appendix 1.**

3.1 Consultation in accordance with ACHCRs

The consultation process is shown in **Figure 3.1** below, and documented in **Table 3.2** and **Appendix 1**, with reference to the four consultation stages specified in the *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010a).

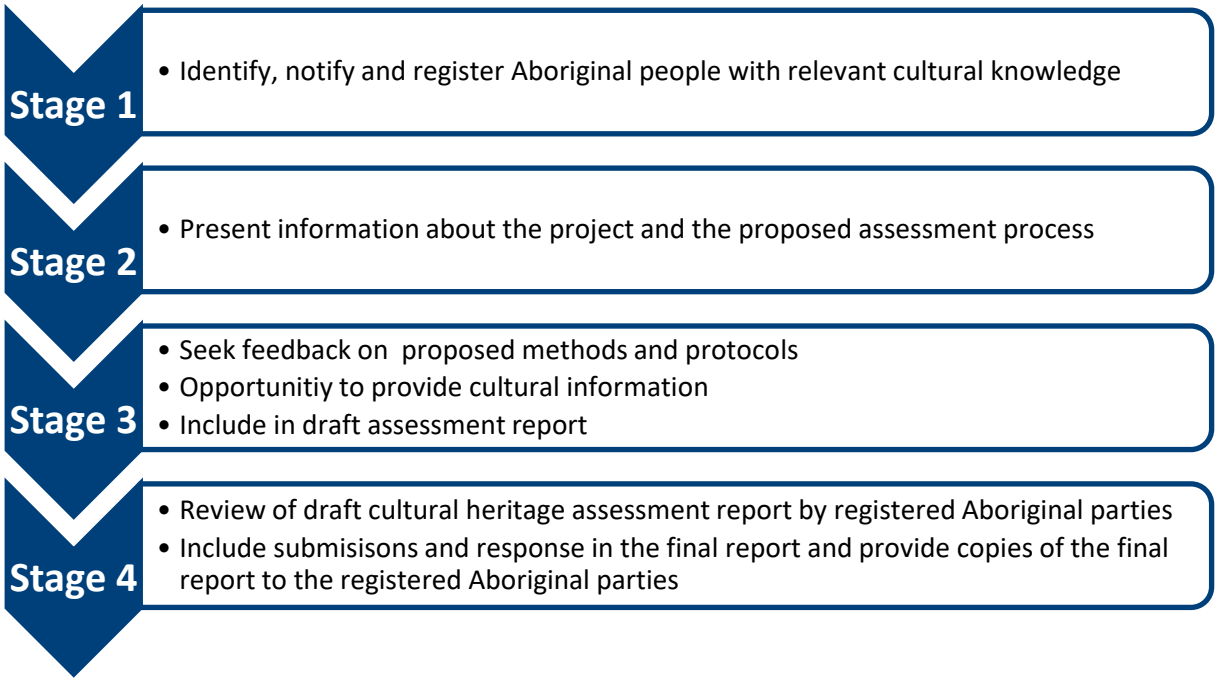


Figure 3.1 Stages in the consultation process

Details about the implementation of each of these stages are provided in the following sections.

3.1.1 Stage 1- Notification and registration

Notifications were developed and the registration of Aboriginal parties was completed in accordance with Part 8A, Clause 80C of the Regulation (now Part 5, Division 2 Clause 60). As a result of the project notification and registration process, 15 Aboriginal parties registered an interest in ongoing consultation regarding the project. These parties are:

- Biraban Local Aboriginal Land Council
- Wannangirni Pty Ltd (previously Guringai Tribal Link Aboriginal Corporation)
- Didge Ngunawal Clan
- Awabakal Descendants Traditional Owners Aboriginal Corporation
- Awabakal Traditional Owners Aboriginal Corporation
- Corroboree Aboriginal Corporation
- Kauwul Pty Ltd trading as Wonn1 Sites
- Awabakal & Guringai Pty Ltd
- Murra Bidgee Mullangari Aboriginal Corporation Cultural Heritage
- Divine Diggers Aboriginal Cultural Consultants
- Yinarr Cultural Services
- Worimi Aboriginal Cultural Services (Tamara Towers)
- Widescope
- Wonnarua Nation Aboriginal Corporation (engaged through the auspices of the ILUA).

3.1.2 Stages 2 and 3- presenting information and gathering information about cultural significance

Correspondence providing information about the proposed project and requesting information about cultural significance was provided to all registered Aboriginal parties. It included a proposed methodology for a cultural heritage survey and an invitation for input in relation to developing an understanding of the cultural values of the Project Area and the ways in which these values may be identified during the field assessment activities.

The registered Aboriginal parties were requested to provide comment on the draft cultural heritage survey methodology. Responses were received from:

- Biraban Local Aboriginal Land Council
- Worimi Aboriginal Cultural Services (Tamara Towers)
- Murra Bidgee Mullangari Aboriginal Corporation Cultural Heritage
- Kauwul Pty Ltd trading as Wonn1 Sites (verbal endorsement)
- Awabakal Traditional Owners Aboriginal Corporation.

None of the responses were in objection to the proposed methodology, which detailed the proposed on-site survey assessment, however Kerrie Brauer of Awabakal Traditional Owners Aboriginal Corporation (ATOAC) expressed some concern regarding a section of the methodology which noted that Centennial Newstan did not have available detailed survey data for Aboriginal archaeological investigations conducted on site over six years prior. This concern was subsequently discussed during fieldwork and the registered Aboriginal party representatives present on site were understanding of the fact that there was limited detailed survey data available from previous assessments. There were no outstanding issues on this subject following the in-field discussion and context provided by Umwelt archaeologists.

Invitations to submit an Expression of Interest for commercial engagement to undertake a survey of the assessment areas to assist in identifying any areas of cultural value were provided to all registered Aboriginal parties with the draft methodology on 1 October 2019. Expressions of interest were received from ten Aboriginal parties, of which six were invited to be commercially engaged to attend the archaeological and cultural heritage survey. Of those six groups invited to participate in the field assessment, Biraban LALC was unable to attend.

3.1.3 Aboriginal Party participation in survey

The registered Aboriginal parties who were represented in the survey are listed below:

- Awabakal Descendants Traditional Owners Aboriginal Corporation (ADTOAC) – Peter Leven/ Tori Leven
- Awabakal Traditional Owners Aboriginal Corporation (ATOAC)- Kyle Howie
- Kauwul Pty Ltd trading as Wonn1 Sites- Arthur Fletcher
- Wonnarua Nation- Renee Gillaine
- Awabakal and Guringai- Jackson Walker.

3.1.4 Outcomes of in-field consultation

During the survey, none of the Aboriginal party representatives present identified any areas of Aboriginal archaeological potential or Aboriginal cultural heritage significance within the Project Area.

3.1.5 Stage 4- Review of draft cultural heritage assessment report

A copy of this draft ACHA was provided to all registered Aboriginal parties on 22 January 2020 for review and comment. This includes those Aboriginal groups who did not participate in the field assessment.

Responses were received from the following registered Aboriginal parties:

- Murra Bidgee Mullangari
- Worimi Aboriginal Cultural Services (Tamara Towers)
- Kauwul Pty Ltd Trading as Wonn1 Sites.

All responses were in agreement with the recommendations of the ACHA. No further feedback was provided nor were any changes requested.

During a phone conversation with Laurie Perry of Wonnarua Nation Aboriginal Corporation on Thursday 20 February, a verbal recommendation was provided relating to cultural land management. This recommendation was summarised and approved by Laurie in a subsequent email. Laurie had no further recommendations or comments on the ACHA. The recommendation provided by Laurie is summarised as below:

> *On the back of the recent devastating bushfires in the Newcastle region, it is requested that consideration be given to conducting cool cultural burns across the Project Area to minimise the risk of future hazards. There is a preference for this work to be conducted by Indigenous businesses, or Aboriginal people with relevant cultural burning knowledge.*

Table 3.1 Newstan Mine Extension Project Aboriginal Party Consultation Log

Date	Type of Consultation	Parties Contacted	Outcome
27 July 2019	Public advertisement providing notification of assessment and opportunity to register interest for consultation.	Advertisement placed in Newcastle Herald	
Pre-Notification Letters			
26 July 2019	Provision of letter requesting identification of Aboriginal parties with cultural knowledge/interest in the Project Area	OEH (Regional Operations)	
		Biraban Local Aboriginal Land Council	
		Office of the Registrar Aboriginal Land Rights Act 1983	
		National Native Title Tribunal	
		NTS Corp Limited	
		Lake Macquarie City Council	
		Hunter Local Land Services	
Pre-Notification/Agency Letter Responses			
29 July 2019	Response to letter requesting identification of Aboriginal parties with cultural knowledge/interest in the Project Area	National Native Title Tribunal	Email response to request we fill out the new form and send to the new email address. Forms filled out and sent back to NNTT to request information.
29 July 2019		Hunter Local Land Services	Forwarded our email to the Biraban LALC.
30 July 2019		Biraban Local Aboriginal Land Council	30 July Ashley Williams expressed interest.
31 July 2019		National Native Title Tribunal	Results show there are no Native Title claimants in the Project Area.
31 July 2019		Lake Macquarie City Council	Email response from Georgie Williams to suggest consultation with: Biraban Local Aboriginal Land Council, Awabakal Traditional Owners Aboriginal Corporation, Awabakal Descendants Traditional Owners Aboriginal Corporation, and Lower Hunter Aboriginal Incorporated.

Date	Type of Consultation	Parties Contacted	Outcome
6 August 2019		Office of the Registrar *Aboriginal Land Rights Act 1983*	Elizabeth Loane emailed to suggest consultation with: Biraban Local Aboriginal Land Council.
12 August 2019		Department of Planning, Industry and Environment (DPIE) Hunter Central Coast Branch	Steven Cox of DPIE replied with a list of suggested Aboriginal parties to contact.
Notification Letters Sent			
14 August 2019	Provision of letter to identified Aboriginal parties requesting registrations of comment on the project	Biraban Local Aboriginal Land Council	14 August 2019 Ashley Williams registered interest.
		Awabakal Traditional Owners Aboriginal Corporation	16 August 2019 Kerrie Brauer registered interest and let us know that Kerrie Brauer, Peter Leven and Tracey Howie are all members of the Centennial Coal Aboriginal Advisory Committee regarding their Aboriginal Cultural Heritage Management Plan, which includes Newstan.
		Awabakal Descendants Traditional Owners Aboriginal Corporation	14 August 2019 Peter Leven registered interest.
		Lower Hunter Aboriginal Incorporated.	
		A1 Indigenous Services	
		Aliera French Trading	
		Resource Association, Miromaa Aboriginal Language and Technology Centre	
		Awabakal & Guringai Pty Ltd	19 August 2019 Kerrie Brauer and Tracey Howie registered interest separately. Trudy Smith registered interest on 26 August 2019.
		Awabakal Descendants Traditional Owners Aboriginal Corporation	
		Awabakal Traditional Owners Aboriginal Corporation	
		B-H Heritage Consultants	
		Corroboree Aboriginal Corporation	17 August 2019 Marilyn Carroll-Johnson registered interest.

Date	Type of Consultation	Parties Contacted	Outcome
		Crimson-Rosie	
		Daniella Chedzey, Jessica Wegener	
		Deslee Talbott Consultants	
		Didge Ngunawal Clan	14 August 2019 Paul Boyd and Lilly Carroll registered interest.
		Divine Diggers Aboriginal Cultural Consultants	20 August 2019 Deidre Perkins registered interest via email.
		Gidawaa Walang & Barkuma Neighbourhood Centre Inc.	
		Wannangini Pty Ltd (previously Guringai Tribal Link Aboriginal Corporation)	14 August 2019 Tracey Howie registered interest.
		Indigenous Learning	
		Jumbunna Traffic Management Group Pty Ltd	
		Kauma Pondee Inc.	
		Kauwul Pty Ltd trading as Wonn1 Sites	19 August 2019 Arthur Fletcher registered interest via phone call to Karyn Virgin. Follow up email received on 19 August by Suzie Worth.
		Lower Hunter Aboriginal Incorporated	
		Lower Hunter Wonnarua Cultural Services	
		Murra Bidgee Mullangari Aboriginal Corporation	19 August 2019 Ryan Johnson registered interest via email.
		Myland Cultural & Heritage Group	
		Roger Matthews Consultancy	
		Wattaka Wonnarua CC Service	
		Widescope Indigenous Group	2 September 2019 Steven Hickey registered interest via email.

Date	Type of Consultation	Parties Contacted	Outcome
		Wonnarua Elders Council	
		Yarrawalk (A division of Tocomwall Pty Ltd), Tocomwall Pty Ltd on behalf of Scott Franks and Anor on behalf of the Plains Clans of the Wonnarua People NSD1680/2013	
		Yinarr Cultural Services	28 August 2019 Kathie Steward Kinchela registered interest via email.
		Kevin Duncan	
		Sharon Hodgetts	
		Kyle Howie	
		Trudy Smith	
		Tamara Towers	29 August 2019 Tamara Towers registered interest via email for Worimi Aboriginal Cultural Services.
		Yvette and Jackson Walker	
Methodology Sent			
1 October 2019	Email and letter containing methodology for survey assessment and EOI to be submitted for commercial engagement	Biraban Local Aboriginal Land Council	
		Wannangini Pty Ltd (previously Guringai Tribal Link Aboriginal Corporation)	
		Didge Ngunawal Clan	
		Awabakal Descendants Traditional Owners Aboriginal Corporation	
		Awabakal Traditional Owners Aboriginal Corporation	
		Corroboree Aboriginal Corporation	4 October 2019 Application for field work received from Marilyn Carroll-Johnson. No comment re methodology.

Date	Type of Consultation	Parties Contacted	Outcome
		Kauwul Pty Ltd trading as Wonn1 Sites	4 November 2019 verbal endorsement of methodology provided by Arthur Fletcher.
		Awabakal & Guringai Pty Ltd	
		Divine Diggers Aboriginal Cultural Consultants	
		Murra Bidgee Mullangari Aboriginal Corporation	4 October 2019 Response from Ryan Johnson advising that the recommendations in the methodology were endorsed.
		Yinarr Cultural Services	
		Worimi Aboriginal Cultural Services (Tamara Towers)	1 November 2019 response from Tamara Towers endorsing the methodology. J.Blackman replied advising if WACS wanted to be commercially engaged the EOI needed to be filled in, with accompanying documentation. Tamara replied advising an issue with printers but would respond as soon as possible. J.Blackman put Tamara down as a verbal EOI in the meantime.
		Widescope Indigenous Group	4 October 2019 Query from Steven Hickey regarding insurances.
		Wonnarua Nation Aboriginal Corporation	
9 October 2019	Email	Wonnarua Nation Aboriginal Corporation	Copy of methodology sent to Laurie Perry with extended date for response as appropriate.
29 October 2019	Reminder email sent to RAP groups for methodology and EOIs	Biraban Local Aboriginal Land Council	30 October 2019 Ashley Williams endorsed draft methodology and provided verbal EOI for commercial engagement.
		Wannangini Pty Ltd (previously Guringai Tribal Link Aboriginal Corporation)	
		Didge Ngunawal Clan	29 October 2019 Paul Boyd registered DNC's interest in participating in methodology/survey. No comment re methodology.
		Awabakal Descendants Traditional Owners Aboriginal Corporation	5 November 2019 Peter Leven provided full EOI documentation and certificates. Acknowledgement email returned. J.Blackman replied thanking him on 6 November.

Date	Type of Consultation	Parties Contacted	Outcome
		Awabakal Traditional Owners Aboriginal Corporation	11 November 2019 Kerrie Brauer replied confirming fieldwork dates and advising that the medical was being arranged for Kyle.
		Corroboree Aboriginal Corporation	EOI already expressed. No further comment on methodology received.
		Kauwul Pty Ltd trading as Wonn1 Sites	
		Awabakal & Guringai Pty Ltd	14 November 2019 Tracey Howie advised that Wannangini will not be registering interest for the project, but Awabakal & Guringai would be. J.Blackman replied 15 November 2019 thanking Tracey and requesting the relevant documentation from A&G. Also advised that Centennial would be updated regarding Wannangini not participating. 15 November 2019 Tracey Howie provided workers insurances. 17 November 2019 Tracey Howie requested EOI be sent again. J.Blackman sent this on 17 November.
		Divine Diggers Aboriginal Cultural Consultants	30 October 2019 Deidre Perkins asked if she had expressed interest in the project. J.Blackman replied advising that Deidre had previously registered for consultation but had not submitted an EOI for commercial engagement.
		Murra Bidgee Mullangari Aboriginal Corporation	
		Yinarr Cultural Services	
		Worimi Aboriginal Cultural Services (Tamara Towers)	1 November 2019 Tamara Towers endorsed methodology and provided certificate of currency. J.Blackman replied requesting EOI for commercial engagement.
		Widescope Indigenous Group	
		Wonnarua Nation Aboriginal Corporation	1 November 2019 Laurie Perry followed up on phone call regarding EOIs. J.Blackman advised that an EOI for engagement was required. Verbal EOI given from Laurie over the phone.

Date	Type of Consultation	Parties Contacted	Outcome
7 November 2019	Email regarding fieldwork availability	Wonnarua Nation Aboriginal Corporation	J.Blackman emailed Laurie Perry asking for EOI documentation and to determine availability of fieldworkers. 8 November 2019 Laurie Perry replied with documentation. 11 November 2019 Laurie Perry provided potential fieldworkers' names. Renee Gillaine also emailed indicating her availability. J.Blackman replied 12 November 2019 requesting Renee's details to pass along to Centennial. J.Blackman also advised Renee that she needed to complete her medical.
		ATOAC	11 November 2019 Kerrie replied confirming dates and advising that she was organising the medical for Kyle.
		ADTOAC	
		Biraban LALC	
		Wannangini Pty Ltd (previously Guringai Tribal Link Aboriginal Corporation)	
8 November 2019	Email	Umwelt contacted by Kauwul Pty Ltd Trading as Wonn1 Sites	Email from Lynne Fletcher advising that the EOI had been sent for fieldwork and the medical was scheduled for Arthur Fletcher.
11 November 2019	Email containing a copy of the medical for those who didn't have it	Wannangini Pty Ltd (previously Guringai Tribal Link Aboriginal Corporation)	
		ATOAC	
		ADTOAC	
22 November 2019	Reminder email to complete the Newstan Medical for commercial engagement	Biraban LALC	26 November 2019 Ashley Williams replied advising they did not have sufficient time to complete the medical and requested an extension. 29 November 2019 Ashley Williams advised that she had requested insurance information to pass along and their site officer was to have a medical conducted that day. Ashley Williams emailed later the same day to advise that the medical was not conducted and Biraban LALC likely could not participate in fieldwork this time.

Date	Type of Consultation	Parties Contacted	Outcome
		Awabakal & Guringai Pty Ltd	22 November 2019 Tracey Howie advised that Jackson Walker had completed his medical for the fieldwork and this had been forwarded.
		ADTOAC	
		ATOAC	22 November 2019 Kerrie Brauer replied with Archaeological Fieldwork Engagement Form attached. Kerrie also expressed concerns regarding a section of the methodology in which it was written that Centennial Coal did not have copies of data from assessments conducted over 6 years ago.
		Wonnarua Nation Aboriginal Corporation	29 November 2019 Laurie Perry advised that Renee may not be able to conduct the fieldwork and he was trying to replace her. J.Blackman advised that this was fine but any replacement workers would also need a medical. L.Perry provided a medical for Georgina Berry, however this medical was insufficient for Centennial. J.Blackman advised L.Perry on 29 November.
		Kauwul Pty Ltd trading as Wonn1 Sites	
Commercial Engagement of RAPs for Fieldwork			
29 November 2019	Reminder email regarding start times/details of fieldwork	Awabakal Descendants Traditional Owners Aboriginal Corporation	
		Awabakal Traditional Owners Aboriginal Corporation	
		Wonnarua Nation Aboriginal Corporation	2 December 2019 L.Perry advised that Renee would be attending fieldwork the following day. J.Blackman replied to confirm.
		Awabakal & Guringai Pty Ltd	
		Kauwul Pty Ltd trading as Wonn1 Sites	

Date	Type of Consultation	Parties Contacted	Outcome
2 December – 6 December 2019	Fieldwork conducted	• Awabakal Descendants Traditional Owners Aboriginal Corporation • Awabakal Traditional Owners Aboriginal Corporation • Wonnarua Nation Aboriginal Corporation • Awabakal & Guringai Pty Ltd • Kauwul Pty Ltd trading as Wonn1 Sites	Results of fieldwork provided in ACHA.
Distribution of Draft ACHA for Review			
22 January 2020	Draft ACHAR sent to RAPs for Review	Biraban Local Aboriginal Land Council	
		Wannangini Pty Ltd (previously Guringai Tribal Link Aboriginal Corporation)	
		Didge Ngunawal Clan	
		Awabakal Descendants Traditional Owners Aboriginal Corporation	
		Awabakal Traditional Owners Aboriginal Corporation	
		Corroboree Aboriginal Corporation	
		Kauwul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher called and requested that a hard copy of the report be posted to him on or after Tuesday 28 January. This hard copy was mailed to Arthur on Tuesday 28 January.
		Awabakal & Guringai Pty Ltd	

Date	Type of Consultation	Parties Contacted	Outcome
		Divine Diggers Aboriginal Cultural Consultants	
		Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson responded on 31 January 2020 advising he endorses the recommendations made. J.Blackman responded 3 February 2020.
		Yinarr Cultural Services	
		Worimi Aboriginal Cultural Services (Tamara Towers)	Tamara Towers responded on 28 February in agreement with the recommendations outlined in the ACHAR (late response).
		Widescope Indigenous Group	
		Wonnarua Nation Aboriginal Corporation	
20 February 2020	Phone call reminder for feedback/comment on the ACHAR	Wonnarua Nation Aboriginal Corporation	Discussion with Laurie Perry whereby he verbally passed along his recommendations. These were summarised in an email by J.Blackman, which was sent to and approved by Laurie.
		Kauwul Pty Ltd trading as Wonn1 Sites	Phone call did not connect and so a follow up email was sent. A response was received from Arthur Fletcher advising that he was supportive in general of the ACHAR.
		Awabakal Descendants Traditional Owners Aboriginal Corporation	Peter Leven advised that he would review the ACHAR and respond as soon as possible.
		Awabakal Traditional Owners Aboriginal Corporation	Phone call did not connect and so a follow up email was sent. Kerrie Brauer responded on 21 February advising she had been out of the office and would try to call the following week.

4.0 Environmental Context

This section provides a summary of key environmental information for the Project Area and assesses the implications of this information for the archaeological evaluation of the Project Area.

4.1 Project Area

The Project Area is located in the Lake Macquarie Local Government Area (LGA) and comprises three distinct locations - the Newstan Colliery, the proposed Extension of Mining Area (which includes Awaba Colliery) and the Forest Road Ballast Borehole and Services Site. The majority of the Project Area comprises unpopulated bushland over the proposed Extension of Mining Area. Lake Macquarie and the surrounding residential suburbs of Toronto, Rathmines, Balmoral, Buttaba, Arcadia Vale and Wangi Wangi are located to the east of the area.

The Project Area is subject to a range of land tenures and ownership arrangements, including:

- Crown land, Crown roads and Crown reserves
- Private land
- State Forest managed by Forestry Corporation of NSW
- State Conservation Area
- Land owned by Lake Macquarie City Council
- Land owned by Origin Energy
- Land managed by RailCorp.

The majority of land that will be impacted by the proposed mining activities within the Project Area is Crown land. Another key landowner is Origin Energy, who own and operate the Eraring Power Station and Eraring Ash Dam that overlay the southwestern portion of the Extension of Mining Area. This portion of the Project Area has been subject to significant disturbance through the installation of the Newstan-Eraring Private Coal Road, the railway loop associated with the power station, and historical land clearance and rehabilitation.

While the Project Area includes the portion of land that comprises the Eraring Power Station and Eraring Ash Dam, due to access restraints associated with the sections of land owned by Origin, the southern portion of the Project Area (approximately 470 hectares) was subject to desktop assessment only and was not physically surveyed.

Over the largest portion of the Project Area, the Extension of Mining Area, the 1,294.5-hectare portion largely comprises a mix of Crown land, Crown roads, lands owned by Lake Macquarie City Council and privately-owned Freehold land. A list of lots included within the Project Area is provided in **Table 4.1.**

Table 4.1 Lots within the Project Area

Location	Lot	DP
Newstan Colliery Surface Site	C	381399
Newstan Colliery Surface Site	441	583057
Newstan Colliery Surface Site	442	583057
Newstan Colliery Surface Site	443	583057
Newstan Colliery Surface Site	148	728974
Newstan Colliery Surface Site	390	1064199
Newstan Colliery Surface Site	64	755207
Newstan Colliery Surface Site	1	121470
Newstan Colliery Surface Site	630	816256
Newstan Colliery Surface Site	631	816256
Newstan Colliery Surface Site	11	1031778
Newstan Colliery Surface Site	12	1031778
Newstan Colliery Surface Site	13	1031778
Newstan Colliery Surface Site	14	1031778
Newstan Colliery Surface Site	15	1031778
Newstan Colliery Surface Site	16	1031778
Newstan Colliery Surface Site	17	1031778
Newstan Colliery Surface Site	18	1031778
Newstan Colliery Surface Site	20	1031778
Newstan Colliery Surface Site	27	755207
Newstan Colliery Surface Site	66	755207
Newstan Colliery Surface Site	182	7372736
Newstan Colliery Surface Site	591	607932
Newstan Colliery Surface Site	234	755207
Newstan Colliery Surface Site	5	46737
Newstan Colliery Surface Site	6	46737
Ballast Borehole and Services Site	194	75507
Extension of Mining Area	99	755218
Extension of Mining Area	100	755218
Extension of Mining Area	101	755218
Extension of Mining Area	54	755218
Extension of Mining Area	6	239629
Extension of Mining Area	5	239629
Extension of Mining Area	9	239629
Extension of Mining Area	10	239629

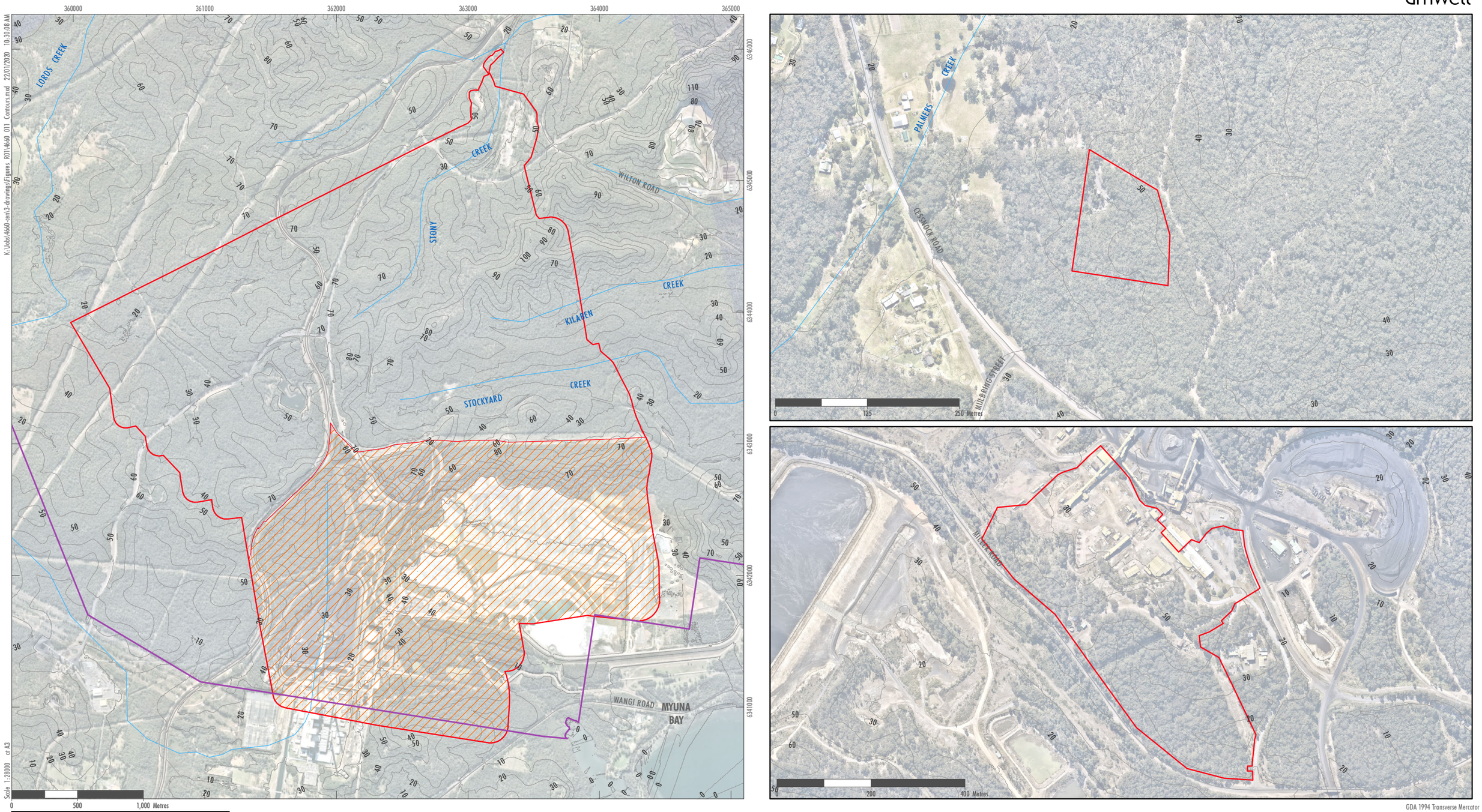
Location	Lot	DP
Extension of Mining Area	213	755207
Extension of Mining Area	3	239629
Extension of Mining Area	4	239629
Extension of Mining Area	7	239629
Extension of Mining Area	8	239629
Extension of Mining Area	212	755207
Extension of Mining Area	1	585142
Extension of Mining Area	110	755207
Extension of Mining Area	1	737496
Extension of Mining Area	21	734860
Extension of Mining Area	20	734860
Extension of Mining Area	211	840670
Extension of Mining Area	50	840671
Extension of Mining Area	51	840671
Extension of Mining Area	1	817425
Extension of Mining Area	102	755218
Extension of Mining Area	214	755207
Extension of Mining Area	121	828283
Extension of Mining Area	100	828283
Extension of Mining Area	11	1050120
Extension of Mining Area	1	582126
Extension of Mining Area	216	755207
Extension of Mining Area	231	755207
Extension of Mining Area	153	755207
Extension of Mining Area	215	755207
Extension of Mining Area	1	1109558
Extension of Mining Area	65	1126625
Extension of Mining Area	462	1138964
Extension of Mining Area	463	1138964
Extension of Mining Area	7305	1149082
Extension of Mining Area	7304	1149082
Extension of Mining Area	7306	1164232
Extension of Mining Area	7309	1164559
Extension of Mining Area	7321	1166295
Extension of Mining Area	7322	1166295
Extension of Mining Area	7320	1166295

Location	Lot	DP
Extension of Mining Area	7336	1170023
Extension of Mining Area	1	1191308
Awaba Colliery Surface Site	1	582126
Awaba Colliery Surface Site	1	816752
Awaba Colliery Surface Site	2	816752
Awaba Colliery Surface Site	6	816752
Awaba Colliery Surface Site	7	816752
Awaba Colliery Surface Site	5	239629
Awaba Colliery Surface Site	6	239629
Awaba Colliery Surface Site	7	239629
Awaba Colliery Surface Site	8	239629
Awaba Colliery Surface Site	9	239629
Awaba Colliery Surface Site	10	239629
Awaba Colliery Surface Site	212	755207
Awaba Colliery Surface Site	213	755207
Awaba Colliery Surface Site	216	755207
Awaba Colliery Surface Site	1	816752

Disturbances that have occurred within or in proximity to the Project Area include the construction and operation of the former Awaba Colliery and Newstan Colliery, vegetation clearance, the deposition of fill and the establishment and ongoing use of access tracks, powerline easements and other infrastructure such as the railway. As previously noted, the portion of the Project Area owned by Origin Energy includes areas of substantial disturbance associated with the Eraring Power Station (refer to **Figure 1.1**).

4.2 Hydrology

A number of watercourses and their first order tributaries intersect the Project Area, including Kilaben and Stockyard Creeks, which flow in an easterly direction into Kilaben Bay, and Stony Creek, which flows in a south-easterly direction into Fennell Bay. The Project Area also intersects Crooked Creek to the south, and LT Creek traverses the Newstan Colliery Surface Site in an easterly direction. These watercourses all form part of the Lake Macquarie catchment area (Department of Lands 2006). The majority of the creeks that intersect the Project Area are ephemeral in nature, with some sections becoming perennial in the lower reaches where they flow into estuarine waters (see **Figure 4.1**).



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GDA 1994 Transverse Mercator

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

FIGURE 4.1

Contours and Hydrology

4.3 Soils and Topography

The Project Area is situated primarily over the erosional Doyalson and Awaba soil profiles, with small areas of the Wyong soil landscape also represented. These are underlain by the Narrabeen Group and Newcastle Coal Measures. Formations such as these contain sandstone, interbedded sandstone, silt, claystone, tuff and coal (Matthei 1995).

The depth of topsoil is a critical consideration for the likely presence of sub-surface archaeological deposits because intact deposits are typically primarily found within A horizon soils. Erosion acts to expose deposits that were formerly sub-surface and impacts on the potential for deposits to retain archaeological integrity. The A_1 horizon within these soil landscapes is typically a brown loose loamy sand to a depth of up to 10 centimetres. The A_2 horizon is typically a hard setting bleached yellowish brown clayey sand to a depth of 10 to 30 centimetres. The total depth of topsoil in this landscape is up to 40 centimetres. B horizons comprise yellowish brown sandy clay loam with varying clay content. This soil profile is consistent across the Project Area.

4.4 Landforms

For the purposes of this ACHA, the Project Area has been divided into landform types based on slope and geomorphic classification and disturbance types. A range of landforms have been identified across the Project Area, with ridgelines and slopes being the most common (refer to **Table 4.2**). Gently inclined and moderately inclined slopes are the most dominant slope types, however there are instances of steeply inclined slopes across the area that are susceptible to slope wash and erosion where the topsoil is exposed. Other key landform elements identified include disturbed terrain (heavily impacted as a result of mining/land use activities) and drainage lines/watercourses.

For reference, the Project Area has been overlayed on a topographic map in **Figure 4.2**. Landforms present within the Project Area are shown in **Figure 4.3** and in greater detail in **Figure 4.4a** and **Figure 4.4b**.

Table 4.2 Landform Types

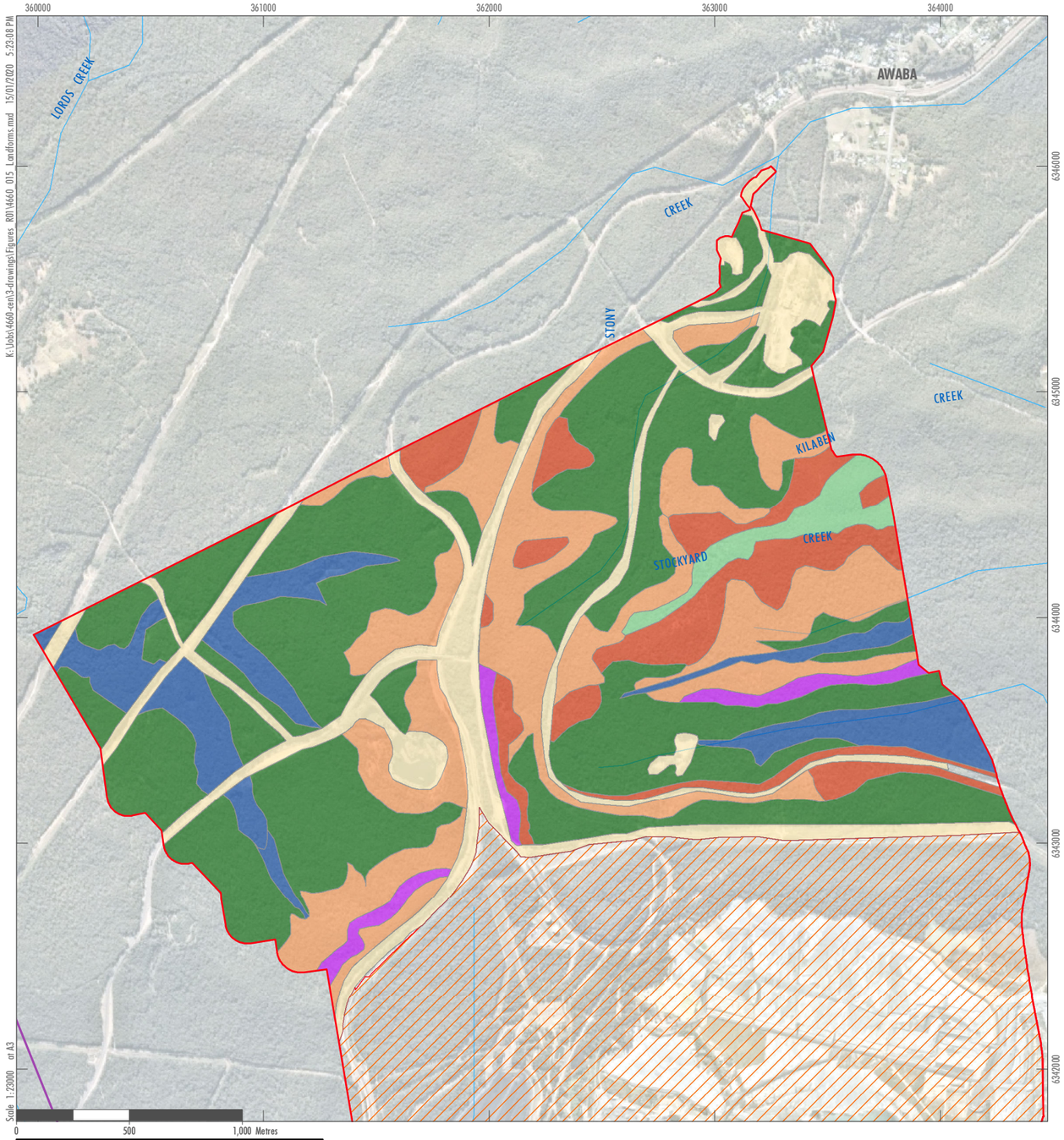
Landform Types
Ridges
Crests
Drainage Lines/watercourses
Disturbed Terrain
Slopes comprising: • Gently inclined • Moderately inclined • Steep slopes

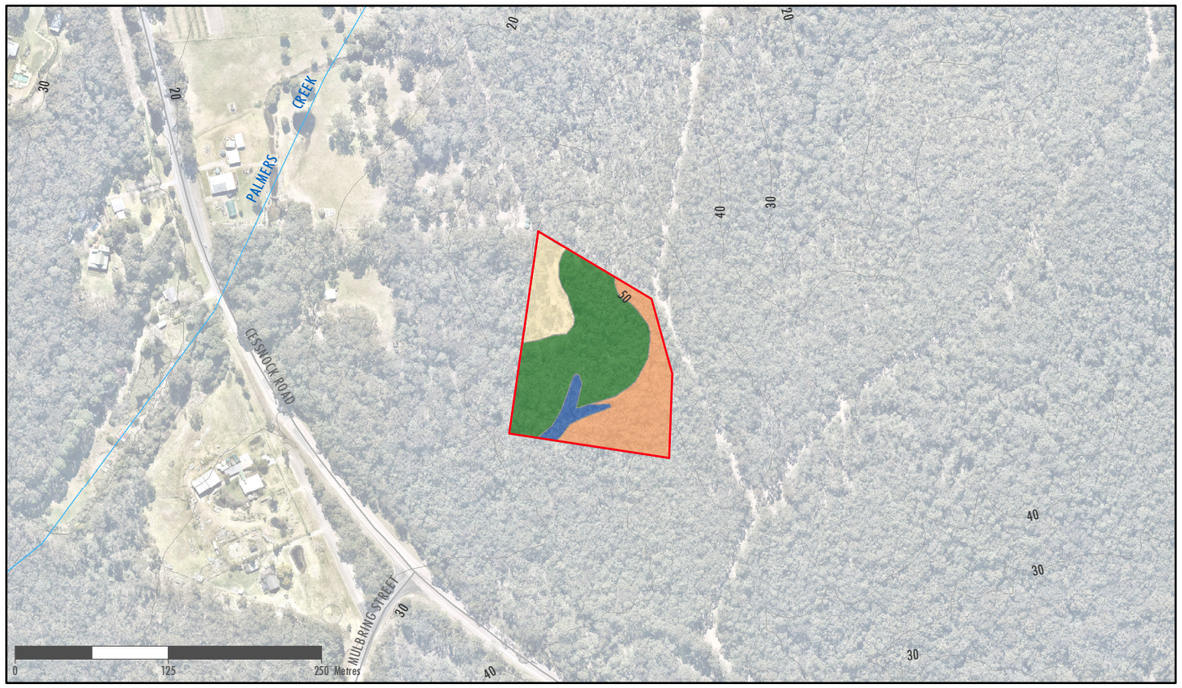


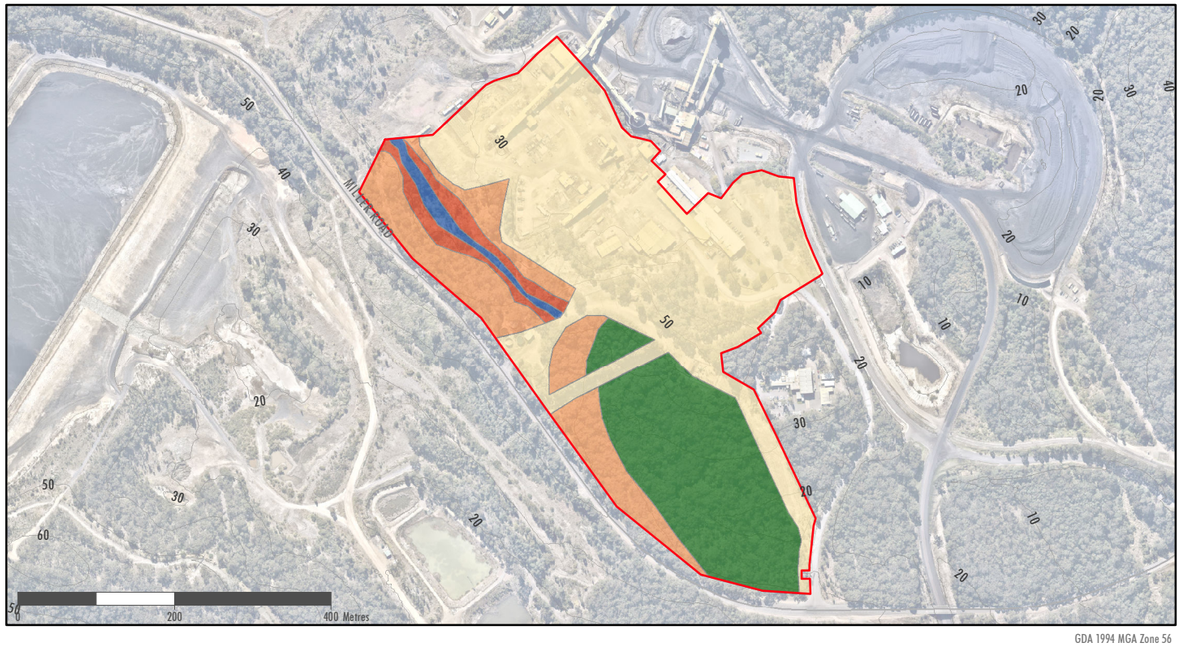
FIGURE 4.2

Topography of the Project Area

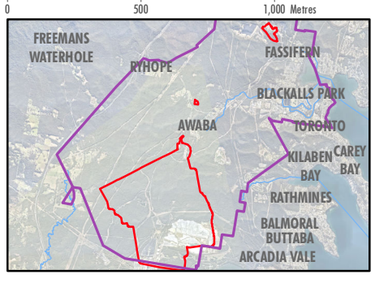
Image Source: Nearmap (July 2019) Data source: DSFI (2017)







GDA 1994 MGA Zone 56



Legend

- Project Area
- Newstan Mine Project Application Area
- Unassessed Area

Landform

- 1 - Disturbed Terrain
- 2 - Gentle Slope
- 3 - Moderate Slope
- 4 - Steep Slope
- 5 - Waterways/drainage lines
- 6 - Ridge
- 7 - Crest

FIGURE 4.3

Landforms in Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

umwelt

359000 360000 361000 362000 363000 364000 365000 366000

6346000 6345000 6344000 6343000 6342000

LORDS CREEK

CREEK

STONY

CREEK

KILABEN

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STOCKYARD

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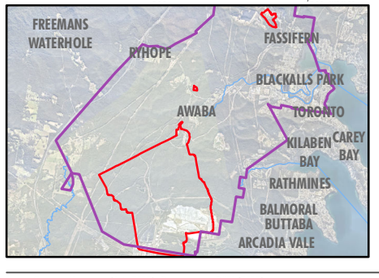
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GDA 1994 MGA Zone 56



Legend

- Project Area
- Newstan Mine Project Application Area
- Unassessed Area
- Survey Units

Landform

- 1 - Disturbed Terrain
- 2 - Gentle Slope
- 3 - Moderate Slope
- 4 - Steep Slope
- 5 - Waterways/drainage lines
- 6 - Ridge
- 7 - Crest

FIGURE 4.4A

Survey Units and Landforms in Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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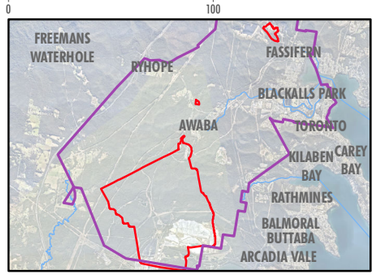
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0 200 400 Metres

GDA 1994 MGA Zone 56



Legend

- Project Area
- Newstan Mine Project Application Area
- Survey Units

Landform

- 1 - Disturbed Terrain
- 2 - Gentle Slope
- 3 - Moderate Slope
- 5 - Waterways/drainage lines

FIGURE 4.4B

Survey Units and Landforms in Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

4.5 Flora and Fauna

The Project Area contains a variety of vegetation types, primarily open dry Sclerophyll forests of Stringybark, scribbly gum, grey gum and black she-oak (RPS 2013). While some portions of the Project Area have been cleared for infrastructure (most notably in the vicinity of Eraring Power Station and Ash Dam) or contain rehabilitated regrowth, a large portion of the Extension of Mining Area contains old growth mature vegetation. A review of the Lake Macquarie City Council Plant Community Types (PCT) map identified nine PCTs as potentially occurring within the Project Area, four of which were identified as containing a Threatened Ecological Community (Centennial Coal 2019:69).

The broad variety of plant species available across the Project Area, as well as sever watercourses and tributaries, indicates that the Project Area would have supported a variety of fauna species. Fauna species found across the Project Area include kangaroo, wallaby, possum species as well as numerous bird species.

4.5.1 Awaba Biodiversity Conservation Area

A minor portion of the Extension of Mining Area is overlaid by a biodiversity offset area (the Awaba Biodiversity Conservation Area), which was established by Lake Macquarie City Council on Lot 463 DP 1138964. Potential impacts to the Awaba Biodiversity Conservation Area have been considered by Centennial Newstan, and further investigations will be undertaken during the EIS to ensure potential impacts to the Awaba Biodiversity Conservation Area from the project are managed appropriately in consultation with Lake Macquarie City Council (Centennial Coal 2019).

4.6 Historical Land Use

The Lake Macquarie region was not settled until well into the 19th Century, due partly to the difficult terrain between the Hawkesbury River and Lake Macquarie, the relative ease of accessing Newcastle city instead, and the prohibition by the government on settlers from colonising areas in the vicinity of penal settlements (Suters *et al*, 1993). Formal European settlement of the Lake Macquarie region took place in 1825 with the land grant of 200 acres to Lieutenant Percy Simpson (Payne n.d.; RPS, 2012), and in 1826, the Reverend Lancelot Threlkeld established an Aboriginal mission on 10000 acres at Bah – ta – bah on the north-eastern shore of Lake Macquarie, at the present site of Belmont (Clack 1977). The site of Threlkeld's home farm was located at the site of present-day Toronto.

While coal was known to exist in the area, the first industry to be attracted to the region was that of timber milling, with several mills operating in the area by the 1880s (Archaeology Australia, 2007). Cedar was particularly sought-after in the early years but was almost completely logged out by the mid-19th century (Stinson, 1994a). Other tree species that were favoured included blue gum, ironbark and turpentine. The first timber workers to move into the Awaba area came from Mulbring, Mt. Vincent and Wallis Plains (Nilsen 1995).

The first coal mining began in the Lake Macquarie area in 1841 when Reverend Threlkeld opened a mine on Coal Point, in competition with the Australian Agricultural Company (AA Co.) Newcastle mines. By the mid-1880s the coal industry was well established in the region, with the Newcastle Wallsend Coal Company, the Minmi Coal Company, the West Wallsend Coal Company and the Monkwearmouth Estate all operational (Suters *et al* 1993).

In 1887, the Northumberland Coal and Land Company sank two shafts near Fassifern, in close proximity to the Main Northern Railway line, and since that time, mining in this area has been continuous with the operators Fassifern Coal Company, Fassifern Colliery Pty Ltd, Newstan Colliery Pty Ltd, Elcom Collieries Ltd and Powercoal (Umwelt 1998).

Early logging, fishing and mining activities saw a great boost in industry with the linking of the railway between Newcastle and Gosford in 1887, and by 1891 Awaba was a large village which had been subdivided, with a school, post office and church all erected by 1898. The Awaba – Wangi Rail Line is a 10 km section of line which provided rail service to the Wangi Power Station. Now abandoned, the line was opened in 1954, closed in 1972 and decommissioned in 1989 (www.nswrail.net). Portions of this rail line intersect the Project Area, however the rail line is not listed in any local historic registers.

4.7 Historic Heritage

A search of the National Heritage Register database, State Heritage Register and Lake Macquarie Local Environmental Plan 2014 (Lake Macquarie LEP) identified 40 heritage items within the Project Area and immediate vicinity, 32 of which are listed on heritage registers.

It is noted that this ACHA does not include an assessment of built or historic heritage impacts, and so the potential impacts to these items as a result of the project have not been assessed in detail. A historic heritage assessment (HHA) is being prepared by Umwelt (2019) concurrently to provide a detailed assessment of the historic heritage values of the Project Area.

4.8 Summary

The environmental context of the Project Area indicates that the area would have provided a range of flora and fauna resources. However, the availability of freshwater within the Project Area is relatively limited, comprising several first and second order tributaries, the limited catchments of which would have resulted in these watercourses being ephemeral in the area.

The Project Area comprises a variety of landforms including ridges, slopes and crests, and this undulating topography, coupled with a lack of permanent fresh water sources, would have made the area less attractive for prolonged occupation by Aboriginal people in the past. The lack of flat ground in close proximity to reliable water sources would have restricted camping options, and the presence of areas such as Kilaben and Myuna Bays, with wider valleys and creek terraces, would have likely drawn Aboriginal people away from the Project Area, with its comparatively more difficult landforms. While the topography and hydrology of the Project Area suggests that Aboriginal occupation in the area would not have been as prolonged or frequent, it is probable that the area was still utilised, including for activities where the availability of water was not as critical.

5.0 Cultural Context

In order to adequately understand and assess the Aboriginal cultural heritage values of an area, it is necessary to also understand the cultural context of the area. The term cultural context encompasses both ethnographic information regarding how Aboriginal people lived in the region during the period of non-Aboriginal settlement and the historical context.

5.1 The Awabakal People

The Project Area is located in the lower Hunter Valley/Lake Macquarie region, within the traditional boundaries of the Awabakal. Earliest European accounts identify the Lake Macquarie area as being a central location of importance for the Awabakal people. While there is some conjecture regarding the boundaries of 'Awabakal Country' it is generally understood to extend south from the Hunter River to Norah Head and Wyong and west to include the Sugarloaf and Watagan Ranges (Umwelt, 2017).

Perhaps the single-most important source of ethnohistoric information for the Awabakal people was the missionary, Lancelot Threlkeld, who established a mission at Belmont and subsequently at Toronto on Lake Macquarie and collated a large body of information on the Awabakal people and their language between 1825-1841.

There is evidence to suggest that the Awabakal engaged in activities and interactions north and south beyond the Lake Macquarie and Hunter River areas. Threlkeld's accounts describe the Awabakal as occupying or travelling through much of the Central Coast, with a direct connection to the Darkinjung and Guring-gai people to the south, as well as to the Wonnarua/Wanaruah to the west and the Worimi to the north (Umwelt 2011). The similarities of the Awabakal language with the Wonnarua/Wanaruah to the west further suggests that the Awabakal interacted extensively with various other Aboriginal groups in the region (Brayshaw 1994).

Historical accounts of the Awabakal note that resources were exploited along the coastline, the shores of Lake Macquarie and along freshwater resources. The early European writers documented that the Awabakal lived in bark huts or 'Gunyah's', with brush material used as windbreaks. Threlkeld also noted in his writings that the local Awabakal name for the Lake Macquarie area was Punte or Derahbambah (Hartley 1998:7). Threlkeld also notes that the area and immediate surrounds was most likely an area utilised by past Aboriginal peoples for the exploitation of resources.

Contact between the Awabakal and early European settlers was varied, with some accounts describing instances of trade between the two (see Blyton 2015), and others noting that relations between Aboriginal people and the white settlers were "hideously violent" (Reeves and Coulter 2006). Relationships were further strained as the European population expanded, and farms were established in the Hunter Valley, where landholders protected and barred their land from Aboriginal people who would have previously accessed the lands.

Altercations became more frequent and violent, and many Aboriginal people moved to Sydney Town or into Newcastle to take on labouring work, where there was some amount of equality in pay and treatment for those willing to engage in physical labour. Others remained on settlers' properties as workers and intermingled this work with traditional lifestyle practices (McDonald 2007 in Virtus Heritage 2019).

5.2 Aboriginal Archaeological Context

A review of available archaeological information is crucial to the cultural heritage assessment process, as it informs the understanding of archaeological site patterning, site survival and the potential for detection of extant archaeological sites. This information is discussed with reference to the outcomes of a search of the Aboriginal Heritage Information Management System (AHIMS) database (which documents the location and nature of sites for which site cards have been lodged with OEH) and a summary of the outcomes of previous archaeological investigations in the local area. This information is then considered with reference to key environmental characteristics discussed above with reference to the archaeological implications for the Project Area.

5.3 AHIMS Search

The AHIMS is a database of Aboriginal places or objects for which site cards have been submitted. Site cards are used to record Aboriginal sites in NSW and the submission of site cards is a requirement of the NPW Act.

A search of the AHIMS database was conducted on 26 July based on a provided spatial data file (shapefile) which encompassed the entirety of the Project Area with a buffer of at least 500 metres to ensure an adequate search area was captured.

A total of 60 sites were identified during the broader AHIMS search. Six have been registered as 'destroyed', with a further three registered as 'deleted'. Of the 51 remaining sites registered as 'valid', the majority (27) constitute stone artefact sites. Modified trees comprised the next highest site type (11), followed by PADs (3) and grinding grooves, habitation structures and Aboriginal ceremony and dreaming places (1 apiece). **Table 5.1** lists the results of the AHIMS search by site type and **Appendix 3** provides the detailed results of the AHIMS search of the Project Area.

Table 5.1 Results of the AHIMS Search

Site Features	Count	Percentage of Total
Artefact	32	53.3%
Modified Tree (carved or scarred)	13	21.7%
Potential Archaeological Deposit (PAD)	5	8.3%
Habitation Structure	1	1.7%
Shell	5	8.3%
Water Hole	2	3.3%
Aboriginal Ceremony and Dreaming	1	1.7%
Grinding Groove	1	1.7%
Total	**60**	**100%**

Of the identified sites, seven are located within the Project Area (see **Figure 5.1**). These sites are all listed as valid sites and comprise two low-density artefact scatters (one with shell material), two isolated artefacts and three modified trees:

AHIMS #45-7-0324 is recorded as a scarred tree. The site is located on a mid-slope in proximity to a nearby quarry/reject dam wall, approximately 20 metres from an existing access track. The tree was recorded by RPS in 2012 and no disease or damage was noted. The tree species was not specified but based on the photographs in the site card, it is suggested that the tree is a Eucalypt, likely an ironbark.

AHIMS #45-7-0300 comprises a single silcrete flake, located within an existing road easement on an upper slope/ridgeline. This site was recorded by RPS in 2010.

AHIMS #45-7-0301 comprises a single chert hammerstone with a ground edge, located in proximity to the existing abandoned railway easement in a creek bank. The site was recorded by RPS in 2010.

AHIMS #45-7-0302 comprises a low-density artefact scatter containing four chert artefacts: 2 flakes, a core, and a chert manuport. This site is located on the edge of an existing access track within an upper slope/ridgeline. It was originally recorded by RPS in 2010.

AHIMS #45-7-0318 is recorded as a scarred tree. It was recorded on the edge of an existing access track on a gentle slope and exhibits evidence of fire damage. The scarred tree was recorded as containing two scars and being of high cultural significance. This site was originally recorded by RPS in 2010 and it was noted that the tree, a species of Eucalyptus (possibly ironbark), was dying, but still standing at the time of recording.

AHIMS #45-7-0319 is recorded as a scarred tree. It was identified on a lower slope in an area of regrowth vegetation in a small tributary of Kilaben Creek. Originally recorded by RPS in 2010, there was no photograph or context map for this site, however it was recorded as being a species of Eucalypt.

AHIMS #45-7-0070 comprises two tuff artefacts, one containing evidence of usewear, surrounded by a scatter of cockle and broken shell. This site was identified on the northern bank of Crooked Creek on a section of bare ground, in proximity to a small modern sportsground.

The site card for this site notes that the two artefacts are no longer extant and are in the possession of the Australian Museum. The site was recorded as also being surrounded by a large amount of modern rubbish.

This site was recorded in 1977 as part of the Environmental Impact survey for the Electricity Commission of NSW.

5.3.1 Outcomes of previous assessments

The Project Area, particularly the area covering the Extension of Mining Area, has been extensively assessed in previous years, primarily by RPS (formerly Harper Somers O'Sullivan) between 2010 and 2013. While these surveys were conducted during different programs (2010-2011 and 2012-2013), the predictions and findings of these surveys were consolidated into a Cultural Heritage Impact Assessment (CHIA) to form part of an EIS for the previously (but no longer) proposed Newstan Colliery Extension of Mining Project in 2013. **Figure 5.2** depicts the previous areas subject to assessment by RPS. It is evident that the Project Area and surrounds have been intensively surveyed over multiple fieldwork programs and there is a reasonably sound understanding of the landforms and archaeological potential of the Project Area based on the results of these assessments.

To supplement the data available via AHIMS and to contribute to the understanding of the archaeological context of the Project Area more specifically, relevant local assessments are summarised below.

Umwelt (2004) Archaeological survey for Centennial Newstan Longwalls 22 and 23

The survey area for this investigation primarily comprised landforms bordering the tributaries of Lords and Stony Creeks. The landscape was assessed as being heavily disturbed, and no new archaeological sites were identified.

Indigenous Outcomes (2007) Archaeological Survey and Aboriginal Consultation for Statement of Environmental Effects

Indigenous Outcomes surveyed the current Project Area and surrounds as part of an Indigenous Archaeological Impact Assessment for a Statement of Environmental Effects at Newstan Colliery in 2007. As part of this assessment extensive Aboriginal consultation was carried out in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC 2005), but also provided additional meetings with various Aboriginal stakeholders and elders groups. The survey was undertaken over a nine-day period between 23 January and 9 of February 2006. Two sites were identified during the survey (AA4 and AA3), both of which fell outside of the current Project Area. AA4 comprised an isolated find and AA3 comprised one potential scarred tree.

RPS (2009) Archaeological Assessment Awaba East Exploration Area Stage 2 Drilling Areas

This study involved a desktop assessment for the Awaba East Exploration Area Stage 2 Drilling area, located within 2km east of the current Project Area. It identified the locations which had been previously surveyed, areas which had previously been mined, as well as, areas which had neither been mined or subject to archaeological survey. This allowed heritage management zones for the exploration area to be defined, for which a set of heritage management protocols were devised (RPS HSO 2009c). No Aboriginal sites were identified as a result of this study.

RPS (2010) Cultural Heritage Impact Assessment for Awaba Colliery, Awaba Colliery

RPS was commissioned to provide a Cultural Heritage Impact Assessment (CHIA) which addresses mining activities within the Awaba Colliery mining areas. The field survey was undertaken to accommodate for the proposed expansion of the pollution control dam at Awaba. The findings identified the Awaba State Mine Pit Top Area and portions of the Awaba-Wangi rail line as items with potential historical value. However, the proposed development would not impact on these structural items. No items of Aboriginal heritage were identified during the field survey. This report led to further heritage assessments undertaken which culminated in the Awaba Post Mining Heritage Management Plan (RPS 2010).

RPS (2012) Aboriginal and European Cultural Heritage Assessment, Newstan Colliery SMP, Centennial Newstan, NSW

RPS were engaged by Centennial Newstan to undertake an assessment of potential subsidence impacts to Aboriginal and European heritage in order to inform and support an application for a Subsidence Management Plan (SMP), in accordance with the 'Guideline for Applications for Subsidence Management Approvals' (DPI-MR 2003). No new survey was conducted during this investigation, however the potential impacts of subsidence on existing Aboriginal and European heritage sites was assessed. This report was prepared in order to supplement the (at the time) in preparation the Centennial Coal Northern Region Aboriginal Cultural Heritage Management Plan (ACHMP), also by RPS (2016). The study found that Aboriginal sites such as rockshelters and grinding groove sites are at the greatest risk of harm as a result by subsidence impacts.

RPS (2013) Cultural Heritage Impact Assessment for Newstan Extension of Mining Projects

RPS were engaged by Centennial Newstan to undertake a Cultural Heritage Impact Assessment (CHIA) to inform an Environmental Impact Statement (EIS) for the proposed Newstan Colliery Extension of Mining Project. The assessment comprised two areas, the Project Application Area, covering approximately 7,453 hectares (ha) and the Subsidence Study Area (the area potentially impacted by subsidence and the subject of focus for the CHIA), covering approximately 3,917 ha. Both areas encompass the current Project Area outlined in this ACHA, with the exception of the Forest Road Ballast Borehole and Services Site in the north. The Subsidence Study Area (SSA) was split into a total of 21 survey units designed to maximise coverage rather than targeting areas of specific archaeological potential, and the SSA was described in terms of varying landforms. A total of 36 previously recorded Aboriginal sites were identified within the SSA, which include the seven AHIMS sites revisited during the field assessment outlined in this ACHA. No new Aboriginal archaeological sites or objects were identified during the RPS assessment.

5.4 Native Title

A search of the National Native Title Tribunal register was undertaken on 17 October 2019. The search did not identify any registered Native Title claims over the Project Area. As previously discussed, the majority of the Project Area is subject to an ILUA, the conditions have which been met through the completion of this assessment.

5.5 Predictive Model

The environmental context of the area demonstrates that the Project Area broadly comprises gently to moderately sloping landforms incised with steeper slopes and crests bordering first and second order tributaries and ephemeral waterways.

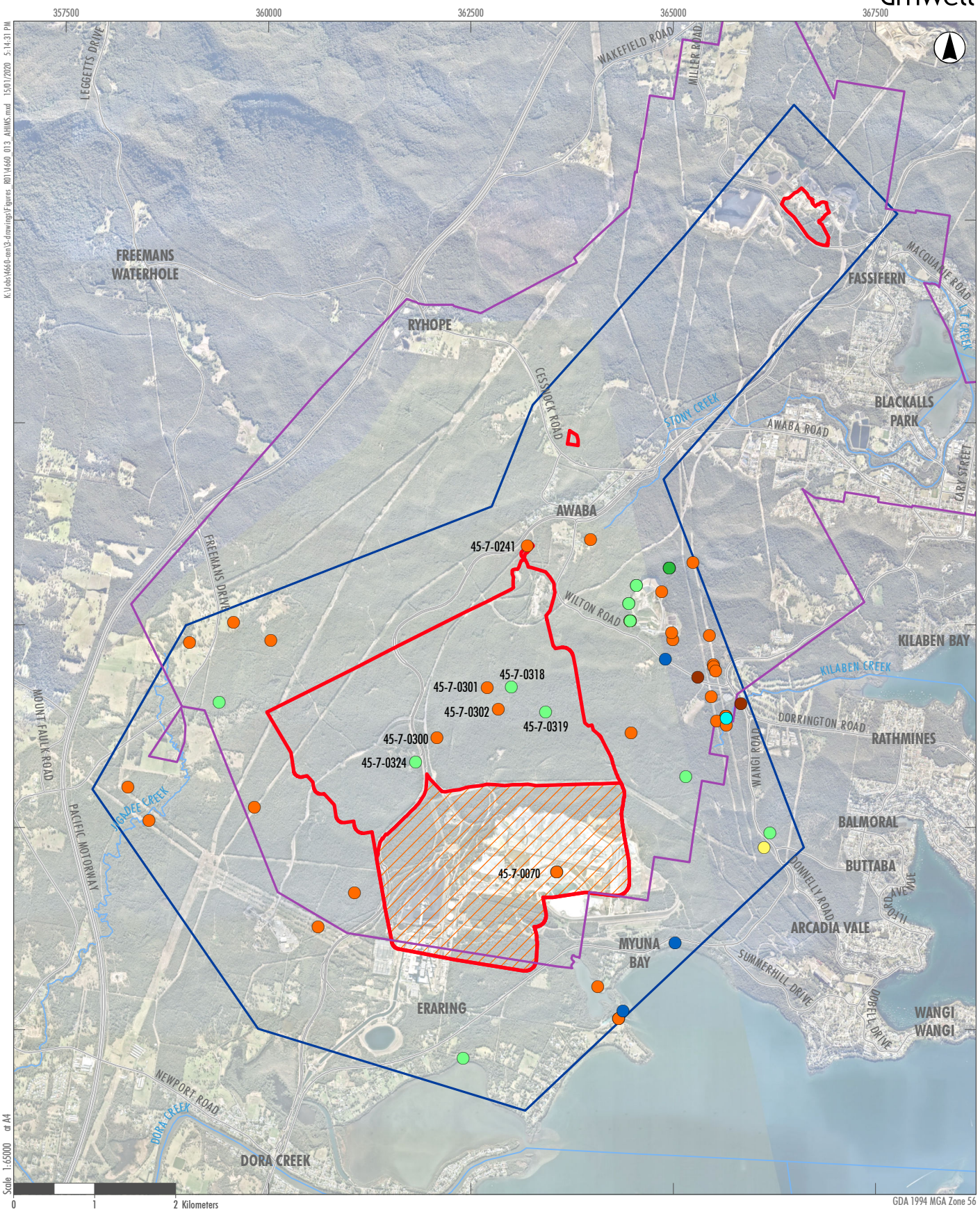
Based on this context, it is likely that the Project Area would have been occupied by Aboriginal people and that archaeological evidence of this occupation may remain. However, based on the lack of permanently available fresh water, the lack of flat terrain surrounding waterways, and the shallow erosion prone soil profile of the area, the potential for intact deposits to occur is limited as it is unlikely that the area supported extensive prolonged habitation by Aboriginal people.

Based on the information presented in **Section 4** and **Section 5,** the following predictive model has been prepared for the Project Area:

- Isolated artefacts and artefact scatters are possible across all landforms. It is expected that any artefact sites will be low density, based on:
    - the lack of reliable water sources within the Project Area, and the known presence of more reliable/attractive sources of water outside of the Project Area
    - the relatively shallow nature of the soil profiles across the Project Area, and
    - the known extant AHIMS sites present within the Project Area, consisting of isolated artefacts, low-density artefact scatters, shell material and scarred trees
- Grinding grooves may be present within first and second order tributaries and possibly at distance from watercourses within the Project Area if sandstone outcrops of a suitable quality occur.
- In areas where suitable old growth vegetation remains, there is potential for modified trees (carved or scarred) to be present. While much of the Project Area has been disturbed and contains regrowth vegetation, some areas of undisturbed vegetation with trees suitable for scarring remain.

- Rockshelters may be present if suitable sandstone outcrops or boulders are present, however based on the landforms within the Project Area, it is unlikely that these features will exist within the Project Area.

- Middens are common along the shores of Lake Macquarie, however, decrease in density and frequency further inland. As middens are typically restricted to foreshore margins or estuarine reaches of Lake Macquarie tributaries, it is unlikely that concentrated middens will occur in the Project Area however it is likely that minor scatters of shell may be present (noting the previous recording of one site containing scattered shell within the Project Area).



Legend

- Project Area
- Unassessed Area
- AHIMS Search Area
- Newstan Mine Project Application Area

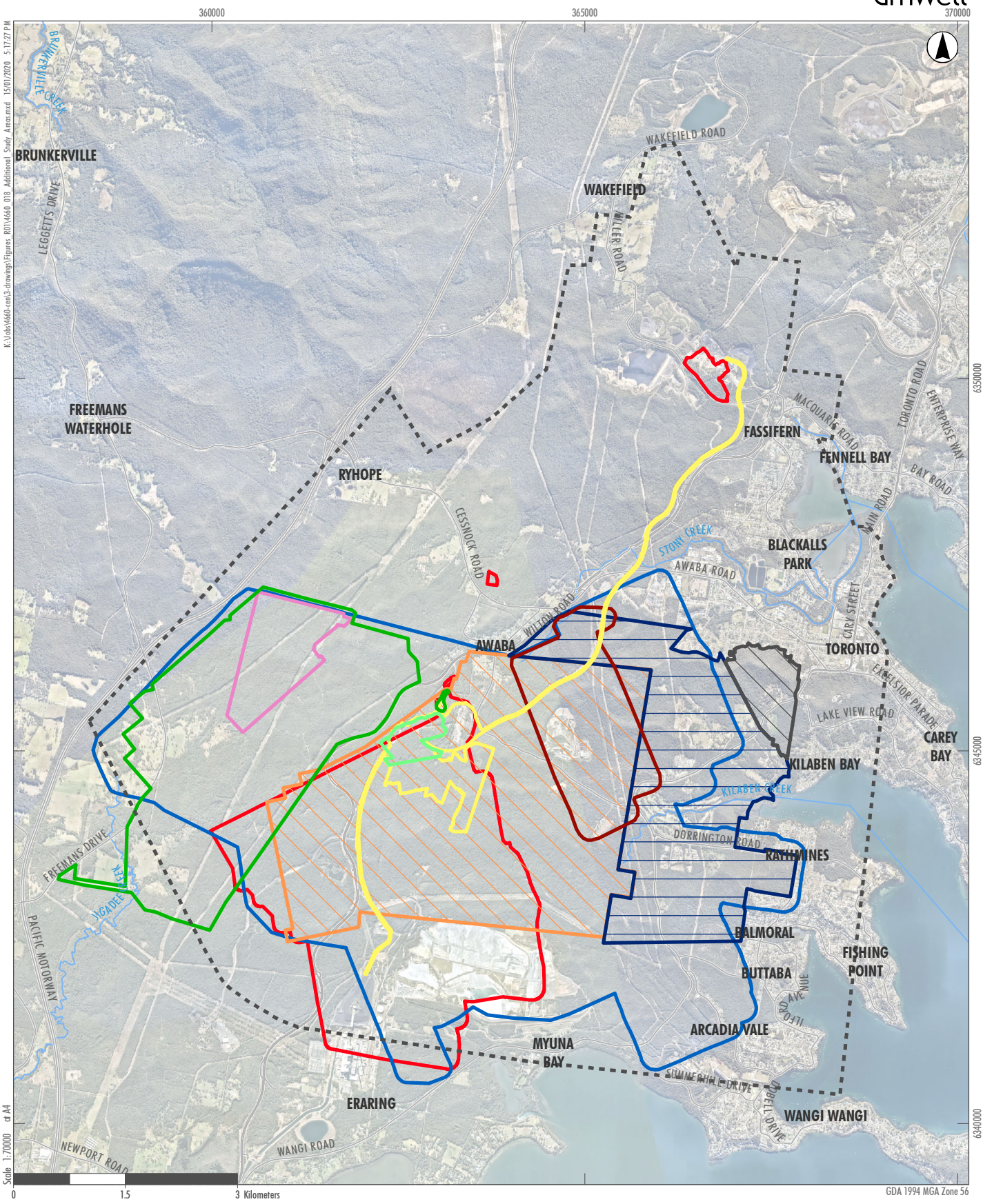
AHIMS Search Results

- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 5.1

AHIMS Search Results

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 5.2

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

6.0 Survey Methodology

6.1 Survey Methodology

A survey of the Project Area was conducted by Umwelt archaeologists and six representatives of the registered Aboriginal parties. During the survey, information was recorded in relation to:

- Landform
- Vegetation
- Geomorphology and soils
- Average ground surface visibility
- Extent of any exposures
- Any information provided by the registered Aboriginal parties in relation to cultural values
- Occurrence of Aboriginal resources (food and medicine plants, prey animals, stone resources, water etc.)
- The presence and location of existing previously recorded Aboriginal sites
- Predicted subsidence impact areas.

The aim of the survey was, as far as practical, to record sufficient information to satisfy Requirement 5 of the Code of Practice and to provide the registered Aboriginal parties participating in the survey with an opportunity to discuss the archaeological and Aboriginal cultural significance of the Project Area, and any sites/objects observed or revisited. These discussions extended to the archaeological materials that may remain below the surface of the Project Area.

6.1.1 Assessment of Archaeological Potential

The assessment was undertaken with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The following terms will be employed to classify the archaeological potential of specific locations:

- **no archaeological potential**: areas where the natural soil profile has been removed through geomorphic processes or human action, thereby removing any archaeological resource of the location. Examples of this category would include a landslide or industrial quarry sites.
- **low archaeological potential**: landscape areas that may have been utilised by Aboriginal people in the past, but at a lower intensity than all surrounding landforms. The density of artefacts deposited within these areas would therefore be low. This category also includes landscape areas of low terrain integrity, where geomorphic processes or human action may have redistributed artefacts from their deposited locations, resulting in site disturbance or destruction.

- **moderate archaeological potential**: landscape areas that are predicted to have been utilised by Aboriginal people in the past, but not intensively or repeatedly. There is therefore potential for artefactual deposition, but at a lower frequency and density than in areas of high archaeological potential. Terrain integrity in these areas may be variable, but the majority of open camp sites are expected to be of low to moderate integrity only, with geomorphic processes not acting to bury deposits *in situ.*

- **high archaeological potential**: landscape areas predicted to have been intensively or repeatedly utilised by Aboriginal people in the past, such as creek confluences or elevated terraces above major watercourses. Terrain integrity in these areas may be variable, but the majority of open camp sites are expected to be of low to moderate integrity only, with geomorphic processes not acting to bury deposits *in situ.*

- **very high archaeological potential**: landscape areas predicted to have been more intensively or repeatedly utilised than all surrounding landforms by Aboriginal people in the past, such as major creek confluences or lagoons. Terrain integrity in these areas may be variable, but these landforms may include areas of high terrain integrity, where geomorphic processes may have acted to bury deposits *in situ*. Sites may therefore be of very high archaeological potential.

6.2 Unsurveyed Area

As noted, the southwestern portion of the Project Area could not be physically accessed due to restrictions relating to management of this land by Origin Energy. This section of the Project Area was instead assessed via desktop analysis, with the archaeological potential considered based on the outcomes of previous archaeological investigations in the area in conjunction with the environmental context of the area. Predictions for the southwestern portion of the Project Area are provided separately where appropriate, and this area was not assigned as an individual survey unit during field survey.

6.3 Results

The survey assessment of the Project Area was conducted over five days between 2 December 2019 and 6 December 2019 by Karyn Virgin (Senior Archaeologist, Umwelt) and Jessica Blackman (Senior Archaeologist, Umwelt) with the Aboriginal parties listed in **Table 6.1** below.

Table 6.1 Aboriginal party representatives who participated in survey

Date	Organisation	Name
2 December 2019	ADTOAC	Peter Leven
	ATOAC	Kyle Howie
	Kauwul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher
	Wonnarua Nation	Renee Gillaine
	Awabakal and Guringai	Jackson Walker
3 December 2019	ADTOAC	Peter Leven
	ATOAC	Kyle Howie
	Kauwul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher
	Wonnarua Nation	Renee Gillaine
	Awabakal and Guringai	Jackson Walker

Date	Organisation	Name
4 December 2019	ADTOAC	Peter Leven
	ATOAC	Kyle Howie
	Kauwul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher
	Wonnarua Nation	Renee Gillaine
	Awabakal and Guringai	Jackson Walker
5 December 2019	ADTOAC	Peter Leven
	Kauwul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher
	Wonnarua Nation	Renee Gillaine
	Awabakal and Guringai	Jackson Walker
6 December 2019	ADTOAC	Tori Leven
	ATOAC	Kyle Howie
	Kauwul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher
	Wonnarua Nation	Renee Gillaine
	Awabakal and Guringai	Jackson Walker

6.4 Survey Units

The Project Area was divided into survey units according to landform, location and access, and named with reference to Requirement 5C of the Code of Practice, including recording track logs for the areas walked by the archaeologists within the survey units using hand-held GPS receivers (set to datum MGA94).

The location of survey units and the distribution of survey participants across the survey units was discussed and agreed in the field with survey participants daily. Survey participants were generally spaced between 5 to 20m apart dependent on ground surface visibility, topography and vegetation, however on occasion it was necessary for survey participants to walk in single file or close proximity due to the denseness of vegetation or to navigate steep banks.

Eighteen survey units were identified in the Project Area and assessed via pedestrian survey (refer to **Figure 6.1** and **Figure 6.2)**. The ground surface visibility and exposure were recorded and analysed for each survey unit, as shown in **Section 6.4**.

6.5 Description of Survey Units

Requirement 5C of the Code of Practice outlines that survey unit boundaries or start/end points must be defined by:

- Landform boundary
- Subject area boundary
- Harm area boundary
- Significant change in survey conditions, or
- Other arbitrary termination.

As outlined in **Section 4** the Project Area contains landforms that include ridges, slopes, crests and drainage channels/gullies. The specific landforms included within each survey unit are described in **Table 6.2**. Survey unit boundaries were largely defined based on arbitrary constraints such as existing internal access track locations, property boundary lines, and existing infrastructure (such as railway lines, powerlines and the Centennial Newstan private haul road). This was due partly to the limited access to some survey units, making existing tracks a critical feature in the landscape, and also as there was only minor variation between landforms/vegetation types across the Project Area, making it difficult to identify individual units based on landform alone.

6.6 Effective Coverage

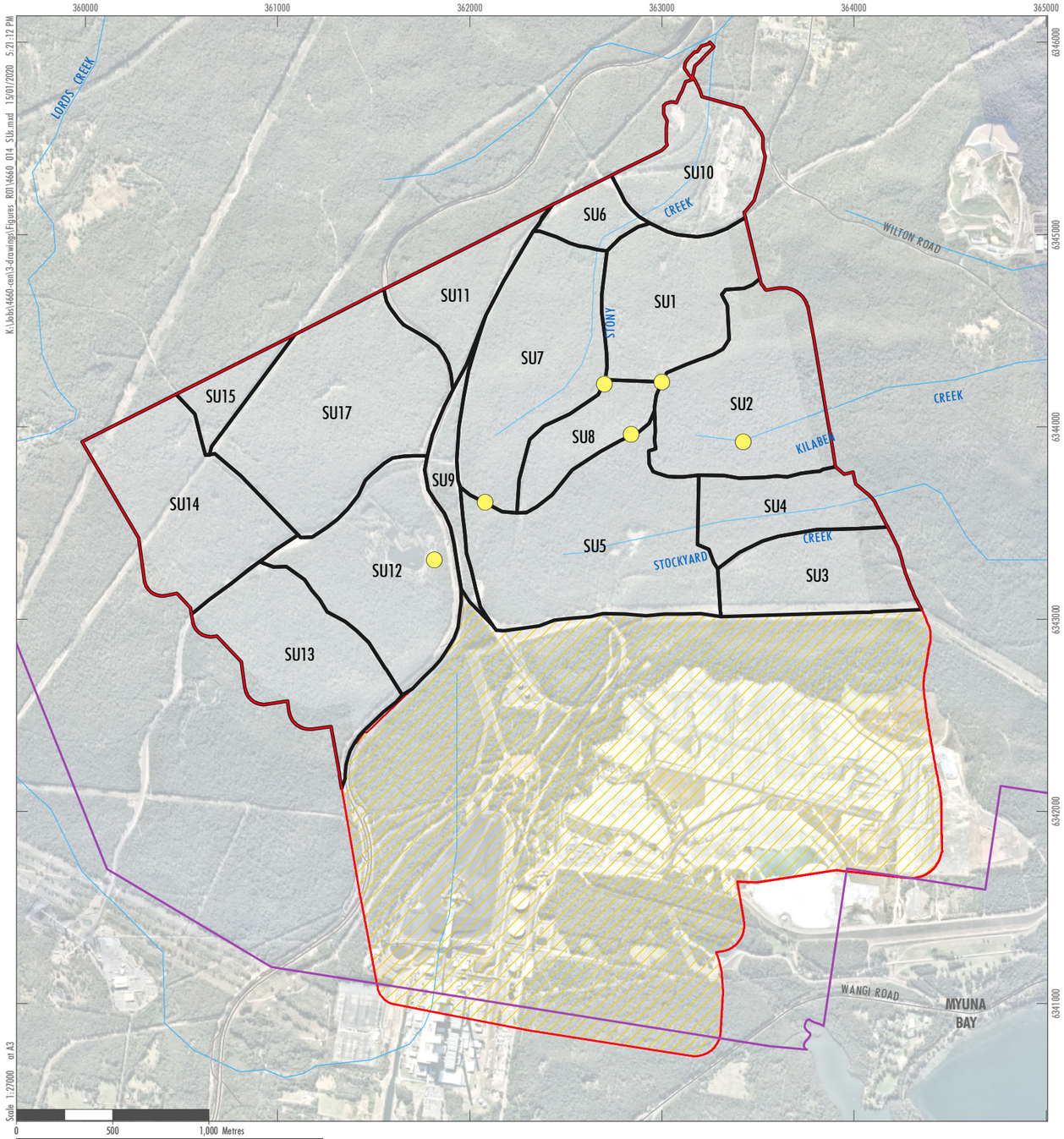
In accordance with the Code of Practice, the survey coverage description includes landform units, the total area surveyed within a landform unit and the quantification of the level of ground surface visibility and exposure. Ground surface visibility is defined as "the amount of bare ground (or visibility) on the exposures which might reveal artefacts or other archaeological materials" (DECCW 2010:13). Exposure is defined as "the percentage of land for which erosion and exposure was sufficient to reveal archaeological material on the surface of the ground" (DECCW 2010:13). As such, exposure refers to the potential for an area to reveal subsurface artefacts or deposits rather than the mere observation of the amount of bare ground.

The calculation of effective survey coverage is undertaken in order to designate the proportion of the Project Area in which it is possible to accurately assess the presence or absence of archaeological material. Survey coverage is calculated by multiplying the total survey area by the percentage of ground surface visibility and exposure within the survey unit. The survey coverage is then expressed as a percentage for the whole survey unit.

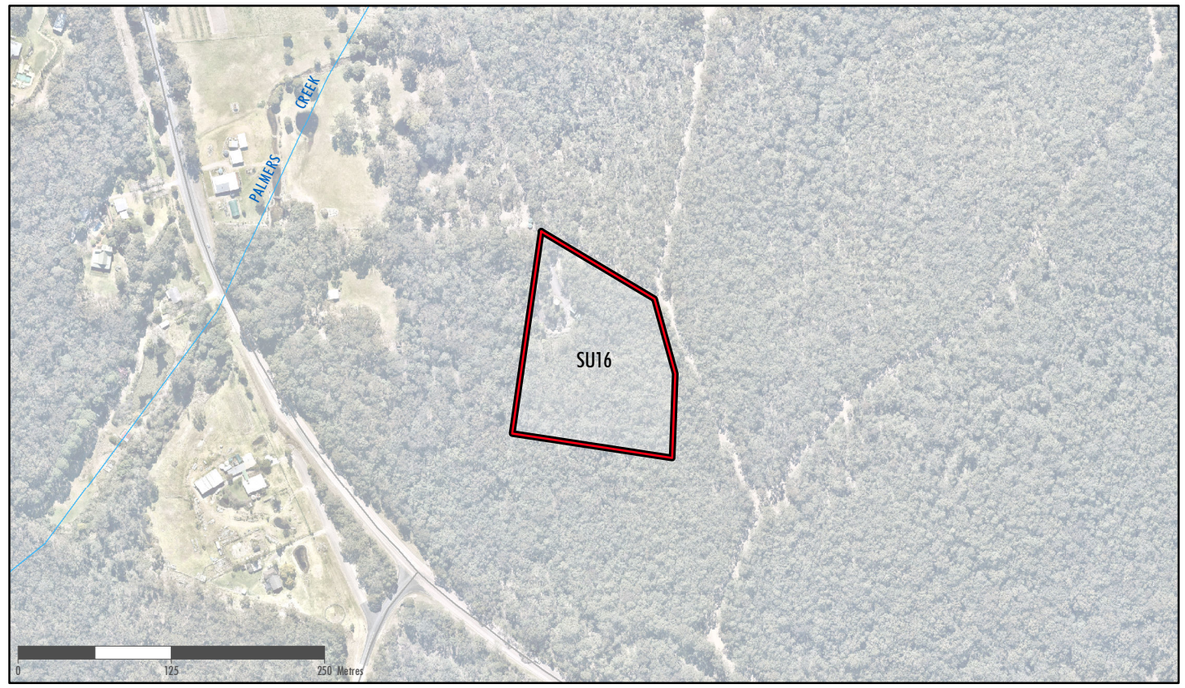
The level of effective coverage within the Project Area was generally very low. The main factor contributing to low coverage was dense vegetation cover (leaf litter, grass), some rubbish and fill material that limited exposure. Areas with the highest levels of effective coverage were modified landforms with significant disturbance, such as access tracks, infilled banks and quarried/cleared areas.

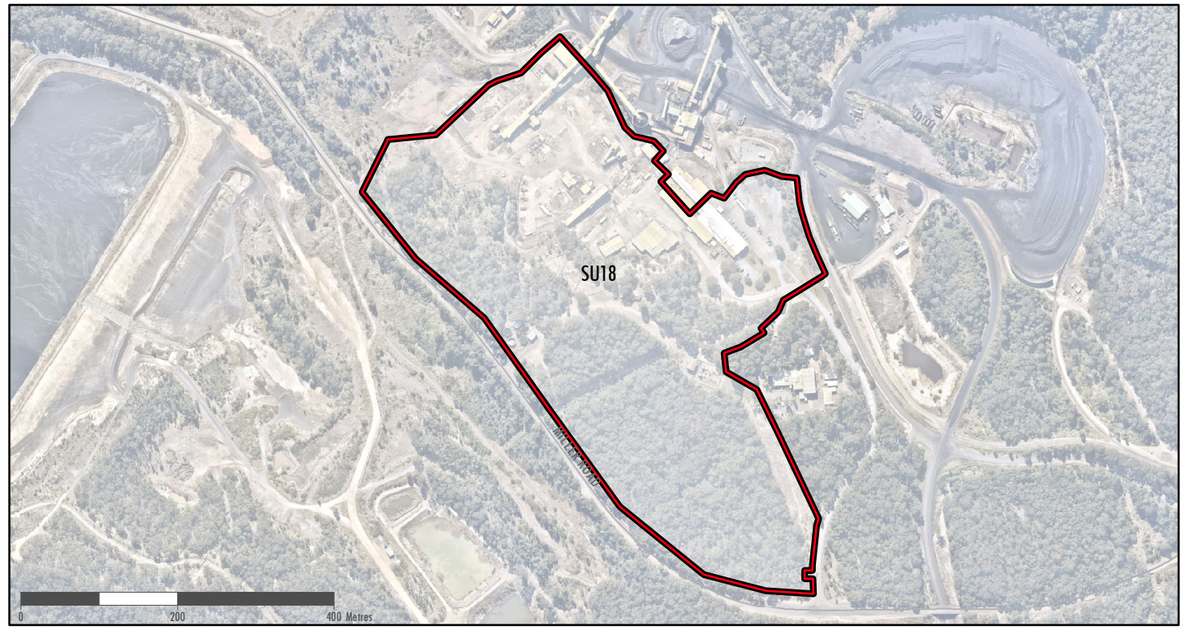
Descriptions of the survey units and the information required to calculate effective coverage for survey units is provided in **Table 6.2.** Images showing typical conditions within survey units are provided in **Table 6.3.**

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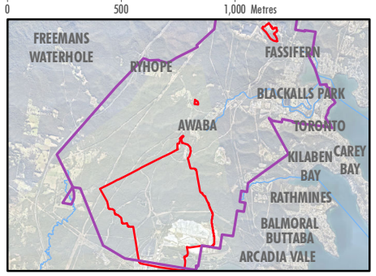


Scale 1:27000 at A3





GDA 1994 Transverse Mercator



Legend

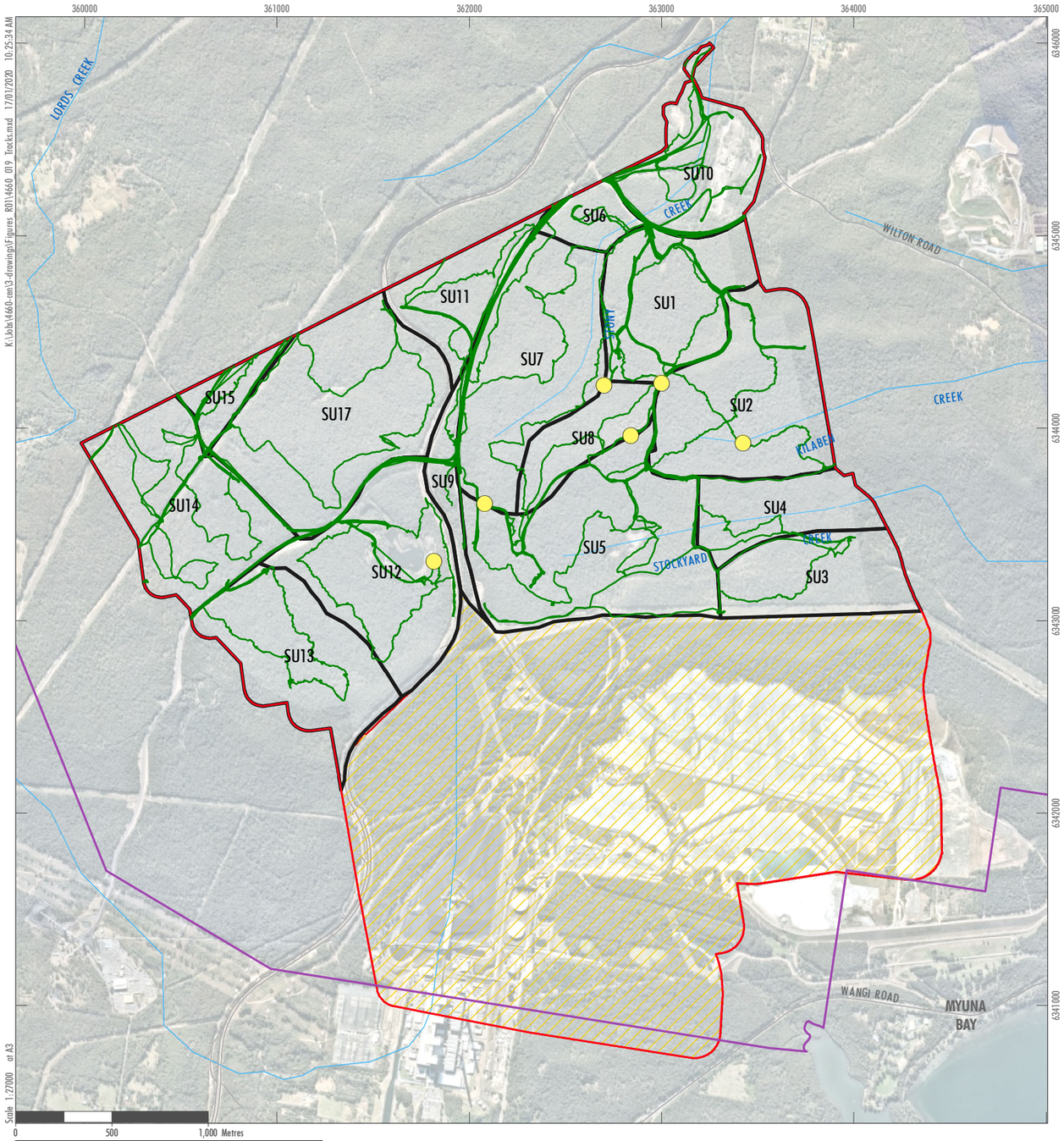
- Project Area
- Newstan Mine Project Application Area
- Survey Units
- Unassessed Area
- Existing registered Aboriginal sites

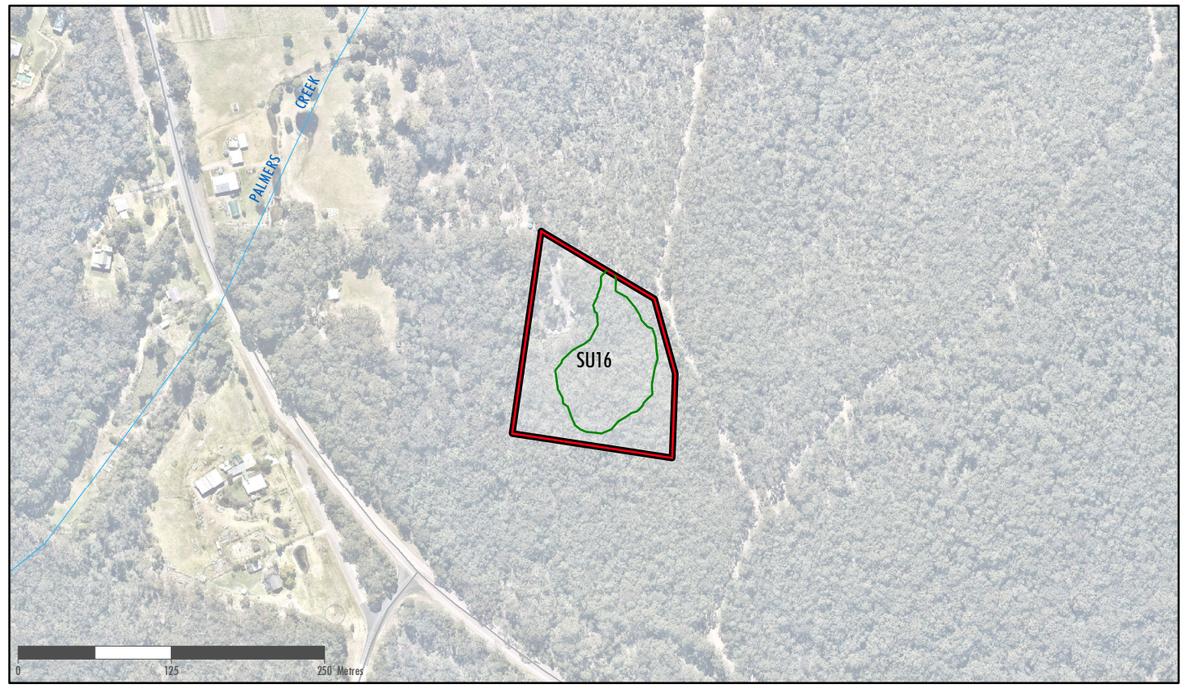
FIGURE 6.1

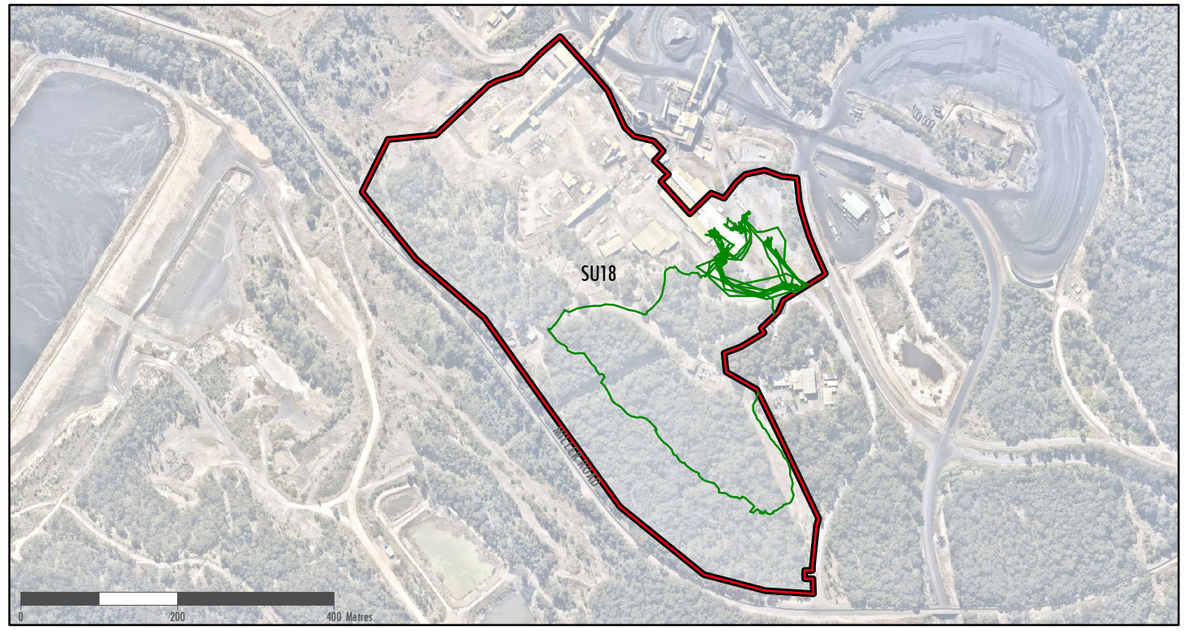
Survey Units

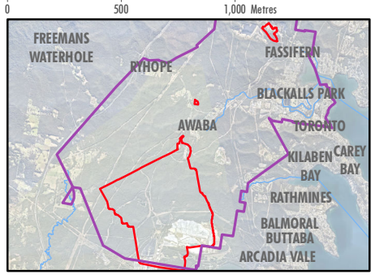
Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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Legend

- Project Area
- Newstan Mine Project Application Area
- Survey Units
- Unassessed Area
- Survey Transects
- Existing registered Aboriginal sites

GDA 1994 Transverse Mercator

FIGURE 6.2

Survey Transects

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

Table 6.2 Survey Coverage

Survey Unit	Landform	Level of Disturbance	Survey unit area (m^2)	Visibility %	Exposure %	Effective coverage area (m^2)	Effective Coverage %	Sites	Archaeological potential rating
SU1	Gentle slopes rising to a ridgeline along southern border. Thick forest/bracken in lower areas.	Low	502,000	10%	10%	5,020.00	1%	No new sites.	Low
SU2	Moderate to steep slopes, incised by Kilaben Creek in southern end of survey unit. Bordered by a ridgeline in northern end and a smaller crest in the south.	Low	694,609	10%	10%	6,946.09	1%	No new sites. 2 previously registered sites.	Low
SU3	Gentle slopes, moderate to steep rise either side of the trainline.	Moderate-Disturbances include trainline intersecting the SU and powerline/property easement to the south.	391,066	10%	10%	3,910.66	1%	No new sites.	Low
SU4	Gentle slopes, Stockyard Creek intersecting survey unit running east-west.	Low	306,170	10%	10%	3,061.70	1%	No new sites.	Low

Survey Unit	Landform	Level of Disturbance	Survey unit area (m^2)	Visibility %	Exposure %	Effective coverage area (m^2)	Effective Coverage %	Sites	Archaeological potential rating
SU5	Slopes (varying inclination), cleared vegetation. Rising to a crest in western end of survey unit and moderate to steep slopes in the north.	High- Disturbances include areas of sinkage/ponding (from prior subsidence).	915,712	10%	20%	18,314.24	2%	No new sites.	Low
SU6	Gentle to moderate slopes, rising to west.	Moderate- bordered by disturbed terrain on north and western sides (existing roads/trainline)	124,542	10%	10%	1,245.42	1%	No new sites.	Low
SU7	Moderate slopes becoming steeper toward the south/southwest.	Moderate- Disturbance includes existing tracks and railway line intersecting survey unit.	712,176	20%	10%	14,243.52	2%	No new sites. 1 previously registered site.	Low
SU8	Majority of survey unit is on ridgeline running roughly south-west. Gentle to moderate slopes.	Moderate- Disturbance includes railway line intersecting survey unit.	223,982	10%	10%	2,239.82	1%	No new sites. 2 previously registered sites.	Low

Survey Unit	Landform	Level of Disturbance	Survey unit area (m^2)	Visibility %	Exposure %	Effective coverage area (m^2)	Effective Coverage %	Sites	Archaeological potential rating
SU9	Disturbed terrain- regrowth/ modification for infrastructure. Moderate slopes dropping to the west. Creates an artificial crest due to installation of road.	High- Disturbed through installation of road and trainline, vegetation clearance and earthworks. SU is almost entirely disturbed.	126,077	20%	10%	2,521.54	2%	No new sites.	Low
SU10	Largely disturbed terrain, containing lower lying landscape with gentle slopes.	High- disturbances include existing infrastructure, rubbish and regrowth vegetation.	406,517	10%	10%	4,065.17	1%	No new sites.	Low
SU11	Disturbed terrain. Moderate slopes rising to a steeper slope in the northwest.	High- disturbances include infrastructure (powerline easement) and existing access tracks.	276,926	20%	10%	5,538.52	2%	No new sites. 1 previously registered site.	Low
SU12	Disturbed terrain- Gentle slopes and some drainage lines intersecting survey unit. Moderate slopes surrounding quarry site and along banks.	High- disturbances include existing quarry site (now with pondage), vegetation clearance and existing access tracks.	657,200	10%	10%	6,572.00	1%	No new sites.	Low

Survey Unit	Landform	Level of Disturbance	Survey unit area (m^2)	Visibility %	Exposure %	Effective coverage area (m^2)	Effective Coverage %	Sites	Archaeological potential rating
SU13	Gentle to moderate slopes, rising to a crest in the south. Some drainage lines/gullies running roughly north-south through survey unit.	Low	554,611	15%	10%	8,319.16	1.5%	No new sites.	Low
SU14	Gentle slopes, larger drainage line running roughly north to south.	Moderate- Disturbances include existing infrastructure (powerline easement, roads) and bushfire scarring.	632,178	15%	15%	14,224.00	2.25%	No new sites.	Low
SU15	Gentle consistent slope with minor drainage line intersecting survey unit.	Moderate- Disturbance include hiking/mountain bike tracks intersecting SU frequently	114,594	15%	15%	2,578.37	2%	No new sites.	Low
SU16	Disturbed terrain with gentle to moderately inclined slope with small gully in the south.	Moderate- existing infrastructure present in the north-west portion of the survey unit. Existing access track runs along the northern border.	17,218	10%	5%	86.09	0.5%	No new sites.	Low
SU17	Slopes of varying inclination, rising generally to the east. Intersected by drainage lines/gullies in the west	Moderate- Disturbed terrain from access tracks/infrastructure.	904,572	10%	10%	9,045.72	1%	No new sites.	Low

Survey Unit	Landform	Level of Disturbance	Survey unit area (m^2)	Visibility %	Exposure %	Effective coverage area (m^2)	Effective Coverage %	Sites	Archaeological potential rating
SU18	Disturbed terrain with a drainage line bordered by steep slopes intersecting SU in roughly southeast direction.	High- Disturbed terrain- rehabilitation regrowth, presence of infrastructure and drainage control.	208,973	10%	5%	1,044.86	0.5%	No new sites.	Low

Table 6.3 Photographs of the Survey Units (Umwelt 2019)

Survey Unit	Description	Photograph (Umwelt 2019)
1	View of Survey Unit 1 facing northeast along existing access track	

Survey Unit	Description	Photograph (Umwelt 2019)
1	View of vegetation cover and ground surface visibility in Survey Unit 1.	

Survey Unit	Description	Photograph (Umwelt 2019)
1	Example of disturbance within Survey Unit 1- quarry area.	

Survey Unit	Description	Photograph (Umwelt 2019)
2	Sloping bank leading into ephemeral drainage line in Survey Unit 2. Photograph taken facing northeast.	

Survey Unit	Description	Photograph (Umwelt 2019)
2	Example of vegetation cover in gully/drainage lines within Survey Unit 2.	

Survey Unit	Description	Photograph (Umwelt 2019)
2	Example of vegetation cover in Survey Unit 2. Photograph taken facing northwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
3	Example of abandoned railway line within Survey Unit 3. Note considerable build-up of soil to facilitate the construction of the railway line. Photograph taken facing west.	

Survey Unit	Description	Photograph (Umwelt 2019)
3	Example of vegetation cover in Survey Unit 3. Photograph taken facing west.	

Survey Unit	Description	Photograph (Umwelt 2019)
3	Example of existing disturbances within Survey Unit 3- internal access tracks/erosion	

Survey Unit	Description	Photograph (Umwelt 2019)
4	Example of vegetation cover within Survey Unit 4. Photograph taken facing east.	

Survey Unit	Description	Photograph (Umwelt 2019)
4	Example of erosion/drainage line in Survey Unit 4.	

Survey Unit	Description	Photograph (Umwelt 2019)
5	Example of disturbance in Survey Unit 5- area of tree logging/sink hole. Photograph taken facing southwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
5	Example of topsoil condition in areas of exposure in Survey Unit 5. Note minor cracking in topsoil.	

Survey Unit	Description	Photograph (Umwelt 2019)
5	Example of vegetation cover and existing access tracks in Survey Unit 5.	

Survey Unit	Description	Photograph (Umwelt 2019)
5	Powerline easement bordering Survey Unit 5. Photograph taken facing west.	

Survey Unit	Description	Photograph (Umwelt 2019)
6	Example of vegetation cover in Survey Unit 6. Photograph taken facing northwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
6	Small gully/drainage line in Survey Unit 6.	

Survey Unit	Description	Photograph (Umwelt 2019)
7	Vegetation cover in Survey Unit 7. Note abandoned railway line in background. Photograph taken facing southwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
7	Example of animal tracks present throughout Survey Unit 7.	

Survey Unit	Description	Photograph (Umwelt 2019)
7	Example of erosion and gullies within Survey Unit 7.	

Survey Unit	Description	Photograph (Umwelt 2019)
8	Example of erosion/banks where abandoned railway line was established in Survey Unit 8. Photograph taken facing north.	

Survey Unit	Description	Photograph (Umwelt 2019)
8	Example of vegetation cover in Survey Unit 8. Photograph taken facing northeast.	

Survey Unit	Description	Photograph (Umwelt 2019)
9	Disturbed nature of Survey Unit 9. Note active railway line in background.	

Survey Unit	Description	Photograph (Umwelt 2019)
10	Existing disturbance in Survey Unit 10- concrete water tanks.	

Survey Unit	Description	Photograph (Umwelt 2019)
10	Example of young regrowth vegetation in Survey Unit 10.	

Survey Unit	Description	Photograph (Umwelt 2019)
10	Example of vegetation density in Survey Unit 10. Photograph taken facing northwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
11	Vegetation density and ground surface cover in Survey Unit 11. Photograph taken facing northeast.	

Survey Unit	Description	Photograph (Umwelt 2019)
11	Large crack observed in Survey Unit 11.	

Survey Unit	Description	Photograph (Umwelt 2019)
12	Vegetation density within Survey Unit 12. Note old quarry/dam in background. Photograph taken facing east.	

Survey Unit	Description	Photograph (Umwelt 2019)
13	Example of vegetation within Survey Unit 13. Photograph taken facing south.	

Survey Unit	Description	Photograph (Umwelt 2019)
14	Portion of Survey Unit 14 recently burnt.	

Survey Unit	Description	Photograph (Umwelt 2019)
14	Powerline easement intersecting Survey Unit 14- Photograph taken facing northwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
14	Vegetation density in unburnt sections of Survey Unit 14. Note existing disturbance in the form of mountain bike/walking tracks.	

Survey Unit	Description	Photograph (Umwelt 2019)
15	Vegetation density in Survey Unit 15. Photograph taken facing southwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
15	Example of disturbance in Survey Unit 15- existing mountain bike/walking trails	

Survey Unit	Description	Photograph (Umwelt 2019)
16	Vegetation density in Survey Unit 16. Note existing surface infrastructure in background. Photograph taken facing southwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
16	Existing surface services infrastructure in Survey Unit 16. Photograph taken facing west.	

Survey Unit	Description	Photograph (Umwelt 2019)
17	Drainage line in Survey Unit 17. Photograph taken facing southeast.	

Survey Unit	Description	Photograph (Umwelt 2019)
17	Example of existing access tracks that intersect Survey Unit 17.	

Survey Unit	Description	Photograph (Umwelt 2019)
17	Vegetation cover in Survey Unit 17. Photograph taken facing southwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
17	Examples of existing disturbance in Survey Unit 17- mountain bike/walking tracks. Photograph taken facing west.	

Survey Unit	Description	Photograph (Umwelt 2019)
17	Powerline easement bordering Survey Unit 17 along the northern edge.	

Survey Unit	Description	Photograph (Umwelt 2019)
18	Existing disturbance in Survey Unit 18- 'Site Cottage'. Photograph taken facing northwest.	

Survey Unit	Description	Photograph (Umwelt 2019)
18	Vegetation density in Survey Unit 18. The survey unit is intersected by a large drainage line/gully which may not be natural in origin.	

Survey Unit	Description	Photograph (Umwelt 2019)
18	Powerline Easement bordering Survey Unit 18. Photograph taken facing southeast.	

6.7 Previously Recorded Archaeological Sites

Due to being present within/in proximity to the Project Area and for their potential to reveal information relevant to developing an understanding of the Project Area's archaeological potential, eight previously recorded archaeological sites were revisited during the survey:

- 45-7-0324
- 45-7-0300
- 45-7-0070
- 45-7-0301
- 45-7-0302
- 45-7-0318
- 45-7-0319
- 45-7-0241.

These sites were also revisited to confirm that the recorded coordinates and locations were accurate. Of the previously recorded sites, only three, comprising scarred tree sites, were able to be relocated, and no additional Aboriginal objects were identified in association with the extant registered sites. AHIMS site #45-7-0070 could not be physically revisited as it is located within the unassessed south-western portion of the Project Area and is located beneath an active ash dam.

6.7.1 AHIMS #45-7-0324

AHIMS #45-7-0324 is registered as a scarred tree and is located within the Project Area on a crest overlooking an existing quarry site within Survey Unit 11. The site was revisited as scarred trees were of particular interest to the Aboriginal party representatives participating in the survey, and to assess current site condition.

The visual inspection of the site confirmed that the description and location provided in the site card is accurate. Comments received from the registered Aboriginal party representatives participating in the survey indicated that this tree was of an unsuitable age and species to likely have been targeted for cultural modification, nor did it contain any diagnostic features such as axe marks. It was suggested that the scar on this tree was natural in origin.



Plate 6.1 AHIMS #45-7-0324 Scarred Tree. Photograph taken facing south-west
© Umwelt, 2019

6.7.2 AHIMS #45-7-0300

AHIMS #45-7-0300 is registered as an isolated artefact (silcrete flake) and is located within the Project Area to the side of an existing access track within Survey Unit 7. As with AHIMS site #45-7-0324, this site was revisited to assess current site condition.

The identified artefact was not able to be located during the visual inspection of the site. No areas or instances of comparable material were identified within the site locale. Based on the location of the original recording on a gravelled access track, it is likely that the artefact has been moved as a result of ongoing vehicle activity.



Plate 6.2 AHIMS # 45-7-300 site location. Photograph taken facing south-east
© Umwelt, 2019

6.7.3 AHIMS #45-7-0070

AHIMS #45-7-0070 is registered as both an isolated artefact and a midden in the AHIMS system. As the site could not be physically revisited during the field inspection due to being located within the Origin Energy owned southwestern portion, the site was assessed via desktop and with reference to its AHIMS site card.

The site is described as consisting of two flakes of tuff surrounded by a scatter of cockle and broken shell, however it is noted that the two artefacts are now located in the Australian Museum. When viewed against the aerial imagery, it appears that this site is situated within the heavily disturbed footprint of the Eraring Power Station, and it is likely that the shell material associated with this site is no longer present and was either collected or discarded at the time that the tuff artefacts were removed.

6.7.4 AHIMS #45-7-0301

AHIMS #45-7-0301 is registered as an isolated artefact (chert hammerstone) and is located within the Project Area in Survey Unit 8 on the eastern side of the existing railway easement, approximately eight metres down-slope from the tracks. This site was revisited to assess its current condition and was of greater interest to the registered Aboriginal representatives participating in the survey due to its more unusual characteristics (material, artefact type).

The identified artefact was not able to be located during the visual inspection of the site. No areas or instances of comparable material were identified within the site locale. The inspected location matched the description on the site card, noting that the area in which the artefact was originally recorded had poor visibility and is located at the base of a relatively steep slope. It is possible that the artefact was either concealed by leaf litter or has been subject to movement as a result of natural processes.



Plate 6.3 AHIMS #45-7-0301 site location. Photograph taken facing north

© Umwelt, 2019

6.7.5 AHIMS #45-7-0302

AHIMS #45-7-0302 is registered as an isolated artefact/low-density scatter (four chert artefacts) and is located within the Project Area to the side of an existing access track with Survey Unit 8. This site was revisited to assess its current condition.

The identified artefact was not able to be located during the visual inspection of the site. No areas or instances of comparable material were identified within the site locale. It is noted that the site card for this site contained limited descriptive information regarding the location of the identified artefacts however the listed coordinates were inspected. As the artefacts were originally recorded on a vehicle access track, it is probable that use of the track by vehicles has resulted in impact to, or movement of the recorded artefacts.



Plate 6.4 AHIMS #45-7-0302 site location. Photograph taken facing south-west.

© Umwelt, 2019

6.7.6 AHIMS #45-7-0318

AHIMS #45-7-0318 is registered as a scarred tree and is located within the Project Area on the edge of an existing access track in Survey Unit 1. The site was revisited as scarred trees were of particular interest to the Aboriginal party representatives participating in the survey, and also so as to enable the context of the registered site to be understood in comparison with the context of the Project Area and other AHIMS sites present within it.

The visual inspection of the site confirmed that the description and location provided in the site card is accurate and the scarred tree was in a similar condition to that noted in the original site recording. Discussions held in the field with the registered Aboriginal parties participating in the survey indicated that it is unlikely that the scarring on this tree is cultural in origin and has instead been scarred through natural processes such as burning or limb breakage. There were no features to indicate that the tree was culturally scarred and the age of the tree suggests that these scars are natural.



Plate 6.5 AHIMS #45-7-0318 Scarred Tree. Photograph taken facing east

© Umwelt, 2019

6.7.7 AHIMS #45-7-0319

AHIMS #45-7-0319 is registered as a scarred tree and is located within the Project Area on the northern slope of a densely vegetated gully incising Survey Unit 2. The site was revisited as scarred trees were of particular interest to the Aboriginal party representatives participating in the survey, and to assess its current condition.

The visual inspection of the site confirmed that the description and location provided in the site card is accurate. During on discussions held with the registered Aboriginal party representatives who were present during the survey, it was suggested that this tree is unlikely to be culturally modified and is instead scarred as a result of natural processes. This is due in part to the height of the scar above ground, as well as the tree species type, which it was indicated is unsuitable for most cultural activities that result in scarring of trees.



Plate 6.6 AHIMS #45-7-0319 Scarred Tree. Photograph taken facing south

© Umwelt, 2019

6.7.8 AHIMS #45-7-0241

AHIMS #45-7-0241 is registered as a low-density artefact scatter (two mudstone flakes and a mudstone core) and is located on an access track within a powerline easement approximately 205 metres north of Survey Unit 9 in the Project Area. This site was revisited s to assess its current condition.

The visual inspection of the site could not relocate the existing site, nor were any areas or instances of comparable material identified within the site locale. The coordinates of the site location as listed in the site card could not be confirmed. While visibility around the site was fairly good, it is still possible that the artefact was either concealed by vegetation or has been subject to movement as a result of natural processes or through ongoing use of the access track.



Plate 6.7 AHIMS #45-7-0241 site location. Photograph taken facing south-west

© Umwelt, 2019

6.8 Areas of Sub-Surface Archaeological Potential

Low levels of visibility do not preclude the potential for additional Aboriginal stone artefacts to be present within a subsurface context throughout the Project Area. The landforms mentioned in **Section 3** are, based on a review of the associated soil landscapes, typically associated with relatively shallow soil profiles that are subject to erosion, which was observed during the survey in areas of exposure and reduced vegetation.

The Project Area has also been subject to a range of impacts as a result of modern land uses, largely relating to the establishment of infrastructure such as access tracks, powerline easements and railway lines, as well as vegetation clearance in some portions.

These activities are likely to have exacerbated the rate and severity of erosion in these areas, which in turn may have resulted in disturbance to topsoil profiles. During the survey of the Project Area, the majority of soil profiles observed comprised exposed, hardened B horizon soils or shallow A horizon sands over B horizon soils or bedrock. The majority of exposed soil profiles were observed in conjunction with modern disturbances such as access track establishment or powerline easement access.

When considered with reference to the archaeological pattern identified within the local area, the criteria for differing levels of archaeological potential as described in **Table 6.2**, and the discussions held around the existing registered sites across the Project Area, the Project Area is assessed as having an overall low archaeological potential. With reference to this level of potential, it is recognised that additional isolated artefacts or low-density artefact scatters may be present, but these are not likely to be common and will typically have been subject to disturbance. Other site types may include scarred trees, noting that, given the level of vegetation clearance and the nature of the trees visible during the survey, these are unlikely to occur with any frequency. Based on the topography and geology of the area, it is considered highly unlikely that any additional sites such as grinding grooves (based on the absence of suitable rock outcrops within identified drainage lines), rock shelters, rock engravings or stone arrangements will be present.

Additionally, the unsurveyed section of the Project Area predominantly comprises landforms that have been wholly modified, including the Eraring Power Station itself and a significant amount of associated infrastructure such as generation facilities, the Eraring Ash Dam, transmission lines, conveyors and shared infrastructure such as the 132 kV transmission lines, water pipelines, and the mine haul road. The less modified portions of this area comprise highly disturbed, rehabilitated land. While this section of the Project Area could not be surveyed, based on the above contextual information, this portion of the Project Area is also assessed as having no to low archaeological potential.

6.9 Information Provided by Aboriginal Party Representatives

In accordance with the approved methodology, Aboriginal party representatives who participated in the survey were invited to provide information on any Aboriginal cultural values that they identified within the Project Area. Information provided by Aboriginal party representatives has been documented in **Section 2.3.1** and is expanded on below**.**

6.9.1 Aboriginal cultural values discussed during inspection

During the survey, the participating Aboriginal parties did not identify any specific cultural values associated with the Project Area, however feedback was provided around the suitability of the area for camping and resource utilisation, and it was noted that nearby Lake Macquarie is a significant area to the Awabakal people.

During the revisit of the existing registered AHIMS sites within the Project Area, discussions were held with the registered Aboriginal representatives participating in the survey and the Umwelt archaeologists around the validity of the three modified trees present in the Project Area (all artefact sites could not be relocated). There was some suggestion from the Aboriginal representatives present that all three previously recorded modified trees were unlikely to be culturally scarred and recommendations were made regarding modifying these sites in AHIMS to ‘not a site’.

Arthur Fletcher of Kauwul (trading as Wonn1 Sites) requested that scarred trees such as AHIMS 45-7-0318, which are located proximity to existing access tracks, be afforded a buffer or protective fencing to avoid accidental damage as a result of track maintenance and other impacts from ongoing use.

Based on the areas covered and the condition/type of landscapes being assessed, it was agreed that the areas surveyed within the Project Area do not require further investigation. Based on maps provided of the Project Area, and from the survey of comparable survey units (such as SU12 and SU5), the field team were satisfied that the unsurveyed portion of the Project Area, overlayed by Eraring Power Station, also does not require additional archaeological investigation.

6.10 Discussion

The survey of the Project Area comprised a pedestrian survey in accordance with the sampling strategy outlined in **Section 6.1.**

No new Aboriginal archaeological sites or objects were identified during the visual inspection of the Project Area, nor were any areas of archaeological potential.

The absence of additional Aboriginal archaeological sites or areas of Aboriginal archaeological potential within the Project Area reflects the following:

- the lack of reliable water sources within the Project Area
- the steepness of land in some portions of the Project Area
- the absence of suitable geological features that support the occurrence of some site types (such as grinding grooves and rockshelters)
- the relatively shallow nature of the soils within the Project Area and their susceptibility to erosion where they are exposed
- the impacts of previous disturbance activities, including vegetation clearance, construction and maintenance of access tracks, drainage management and quarrying.

While the unsurveyed portion of the Project Area, it was noted that this area is significantly disturbed as a result of the establishment of the Eraring Power Station and associated infrastructure and has been subject to historic and modern disturbances. Those areas within this portion of the Project Area that are not overlayed by the power station footprint largely consist of regrowth vegetation and contoured land for water runoff control. It was agreed upon discussion between archaeologists and the registered Aboriginal parties participating in the survey that this section of the Project Area, in conjunction with the results of the survey of the northern survey units and the environmental context, has no to low archaeological potential.

Based on the criteria for the assessment of archaeological potential the Project Area is deemed to have low archaeological potential across its entirety.

7.0 Significance Assessment

The Australian ICOMOS *Burra Charter* 1999 (the *Burra Charter*) defines cultural significance as meaning 'aesthetic, historic, scientific or social value for past, present or future generations' (Article 1.2). The *Burra Charter* was written to explain the basic principles and procedures that should be followed in looking after important places.

7.1 Social or Cultural Value

Cultural heritage value refers to the spiritual, traditional, historical or contemporary associations and attachments a place has for Aboriginal people (OEH 2011:8). There is not always a consensus about the cultural value of a place as people experience places and events differently. Cultural significance can only be determined by Aboriginal people and is identified through Aboriginal community consultation.

It was recognised that registered Aboriginal parties may wish to provide information regarding the cultural significance of the Project Area following the review of the draft version of this report. Following the conclusion of the consultation period, no additional information was provided regarding the cultural significance of the Project Area.

7.2 Scientific Values and Significance Assessment

Archaeological significance is assessed against a number of archaeological criteria as set out by the OEH (now DPIE) in the Code of Practice. The key criteria for the assessment of archaeological significance are outlined below in **Table 7.1.**

Table 7.1 Criteria for the Assessment of Archaeological Significance

Criterion	Low	Moderate	High
Rarity	The site within the surrounding landscape, its integrity, contents and/or potential for subsurface artefacts, are common within the local and regional context.	The site within the surrounding landscape, its integrity, contents and/or potential for subsurface artefacts, are common within the local context but not the regional context.	The site within the surrounding landscape, its integrity, contents and/or potential for subsurface artefacts, are rare within the local and regional context.
Representativeness	This site, when viewed in relation to its integrity, contents and/or potential for subsurface artefacts is common within a local and regional context and sites of similar nature (or in better condition) are already set aside for conservation within the region.	This site, when viewed in relation to its integrity, contents and/or potential for subsurface artefacts, is uncommon within a local context but common in a regional context and sites of similar nature (or in better condition) are already set aside for conservation within the region.	This site, when viewed in relation to its integrity, contents and/or potential for subsurface artefacts is uncommon within a local and regional context and sites of similar nature (or in better condition) are not already set aside for conservation within the locality or region.

Criterion	Low	Moderate	High
Research potential	The site, when viewed in relation to its integrity, contents and/or potential for subsurface artefacts has limited potential to contribute to a greater understanding of how Aboriginal people lived within this area or region.	The site, when viewed in relation to its integrity, contents and/or potential for subsurface artefacts has moderate potential to contribute to a greater understanding of how Aboriginal people lived within this area or region.	The site, when viewed in relation to its integrity, contents and/or potential for subsurface artefacts has high potential to contribute to a greater understanding of how Aboriginal people lived within this area or region.
Education potential	The site is not readily accessible and/or when viewed in relation to its contents, integrity and location in the landscape has limited suitability to be used for educational purposes. Other sites with higher education potential are known to be present in the local area and region.	The site is not readily accessible and/or when viewed in relation to its contents, integrity and location in the landscape provides a tangible example that is suitable to assist in educating people regarding how Aboriginal people lived in this area or region. However, other sites with higher education potential are known or expected to be present in the local area or region.	The site is readily accessible and/or when viewed in relation to its contents, integrity and location in the landscape, provides a very good tangible example that is suitable to assist in educating people regarding how Aboriginal people lived in this area or region. Other sites of higher education potential are generally not known to exist in the local area or region.
Integrity	Stratigraphic integrity of the site has clearly been destroyed due to major disturbance/loss of topsoil. The level of disturbance is likely to have removed all spatial and chronological information.	The site appears to have been subject to moderate levels of disturbance, however, there is a moderate possibility that useful spatial information can still be obtained from subsurface investigation of the site, even if it is unlikely that any useful chronological evidence survives.	The site appears relatively undisturbed and there is a high possibility that useful spatial information can still be obtained from subsurface investigation of the site, even if it is still unlikely that any useful chronological evidence survives.

7.3 Assessment of Archaeological Significance

As noted above, no new Aboriginal archaeological sites were identified within the Project Area, however seven previously registered Aboriginal archaeological sites exist across the area, and a further single registered site is located within 300m of the Project Area boundaries.

In relation to the sites containing stone artefacts, the types of artefacts and the raw materials that the existing sites consist of are standard for artefact expectations in the region. These sites are in areas with limited depth of topsoil and which have been subject to previous disturbance, likely impacting the archaeological integrity of the sites. When considered against the criteria in **Table 7.1**, these sites have low archaeological significance.

The scarred trees within the Project Area were recorded between 2010 and 2012 during different field programs with Aboriginal representatives in attendance. Whilst the opinions and cultural assessment by those archaeologists and Aboriginal community members is respected, it is suggested that these trees are scarred as a result of natural processes and are not cultural in nature. However, for precautionary purposes, and pending any definitive decision made on the cultural status of these trees, the existing significance assessment has been retained.

The assessment of significance for areas of archaeological potential (within which there are no visible Aboriginal objects) is inherently difficult as any such assessment can only be based on the nature of the evidence that the area may contain. For this reason, the assessment of significance of areas of archaeological potential remains a provisional assessment of potential significance only and is linked almost entirely to the research potential of the site. That is, areas of low archaeological have a provisional assessment of low archaeological significance. This is applicable to the Project Area as a whole.

7.4 Historic Value

Historic value encompasses all aspects of history and often underlies other values. A place may have historic value because it has influenced or been influenced by a historic event, phase, movement, activity, person or group of people.

No specific areas or items of historical value with a direct association with Aboriginal people were identified in the Project Area during the survey assessment, and none of the Aboriginal representatives present during the survey provided any additional information regarding the historical values of the Project Area.

7.5 Aesthetic Value

Aesthetic value refers to the sensory and perceptual experience of a place. It may consider form, scale, texture and material of the fabric of the landscape and may also include smell and sounds associated with the place (OEH 2011:9).

None of the Aboriginal parties provided any additional information regarding the aesthetic values of the Project Area.

8.0 Impact Assessment

The key impacts associated with the project will primarily relate to underground mining activities, such as vertical subsidence, as well as some vegetation clearance for infrastructure. Impacts will vary across the Project Area dependent upon the specific activities or requirements relating to the expansion of mining.

A subsidence assessment was carried out by Mine Subsidence Engineering Consultants (MSEC) in 2019, who investigated the potential subsidence impact across the Project Area. It was predicted that the Project Area will see a maximum vertical subsidence of 3250 mm, with the greatest subsidence predicted to occur where the proposed panels mine directly beneath the existing workings in the Great Northern Seam (refer to **Figure 8.1**).

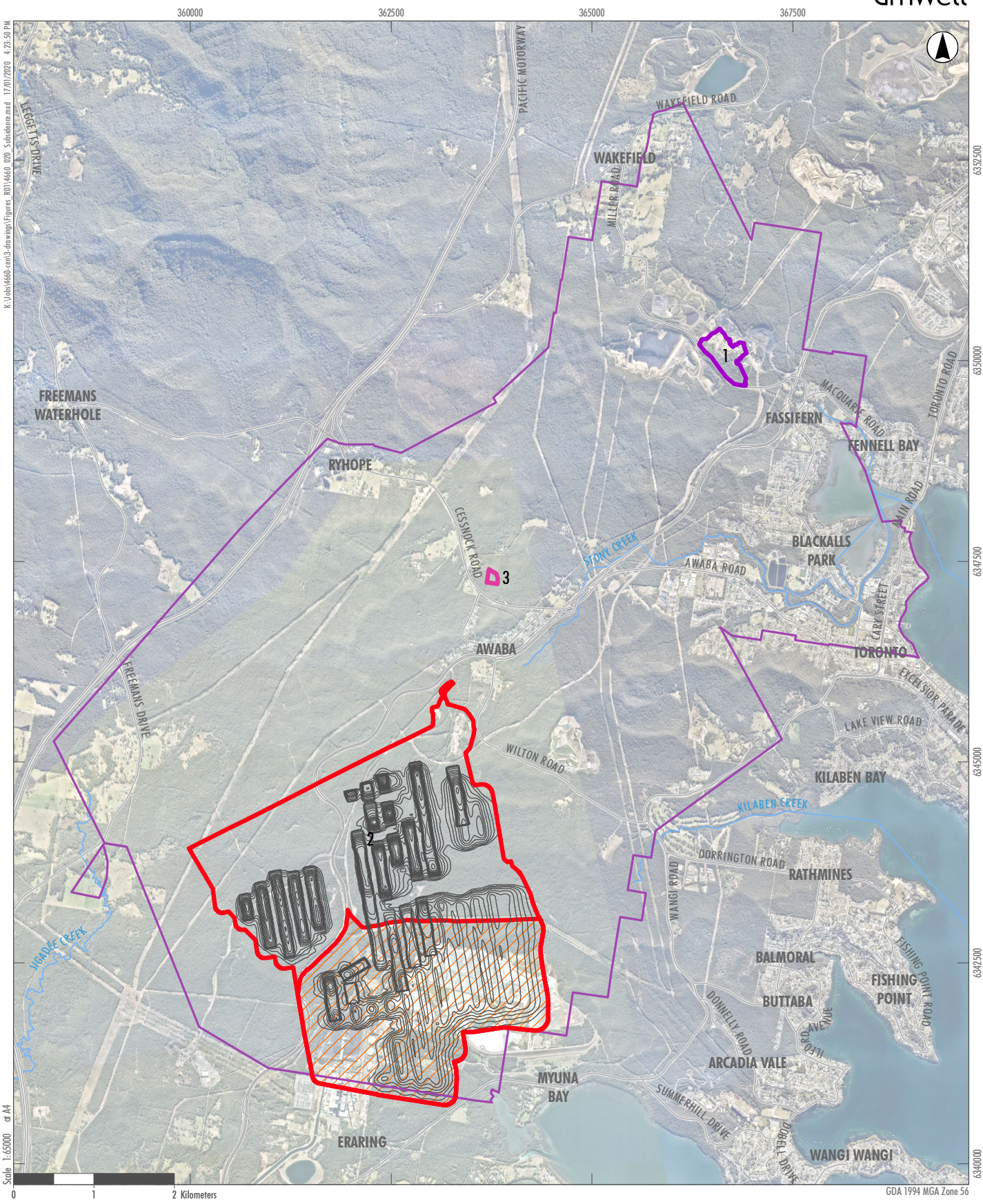
Aboriginal sites can be impacted by subsidence in various ways. Generally, shell middens, stone assemblages (such as artefact scatters or isolated artefacts) and scarred trees can withstand the relatively minor ground surface impacts as a result of subsidence (RPS 2012:54). Subsidence can however be harmful to these sites when the impacts may lower the integrity of a broader complex, such as from ground surface cracking, and changes to ponding/surface water runoff can disturb or destabilise these sites. In the case of a total plug failure, substantial ground disturbance may occur as a result of rehabilitation works to remediate the area where the plug failure has occurred.

In areas of substantial subsidence, where a vertical drop is observed, sites such as rock shelters, art sites and grinding grooves have the potential to be significantly impacted. Sandstone, comprising a brittle matrix, has a tendency to crack and sheer at points of weakness, and while natural weathering and erosion processes can also cause sandstone structures to collapse/exfoliate, subsidence can exacerbate these processes and subsequent damage to these sites.

In the unsurveyed portion of the Project Area, the Eraring Power Station is not expected to experience impacts as a result of subsidence, as the power station itself is located south of the proposed mining area. However, some shared infrastructure such as the Newstan-Eraring Private Coal Road are located directly above the partial and total extraction areas and may experience vertical subsidence of up to approximately 1.9 metres. As noted in **Section 6.8**, those sections of the unsurveyed portion of the Project Area that are not wholly modified as a result of the establishment and maintenance of the Eraring Power Station primarily comprise highly disturbed, rehabilitated land. While these portions of land, particularly in the north-western portion of the unsurveyed area may experience direct or indirect impacts as a result of subsidence, due to the identified low archaeological potential of these areas as a result of extensive prior disturbance, it is not expected that impacts from subsidence will affect any unrecorded Aboriginal sites within the unsurveyed portion of the Project Area.

There are seven previously recorded Aboriginal heritage sites located within the Project Area and a further site located within a 300m boundary of the Project Area. These sites comprise three scarred trees and five isolated artefact/artefact scatter sites, with one site also containing shell material. Further detail is provided on these sites in **Section 6.6.** No rock shelters, grinding grooves or art sites have been previously identified across the Project Area and based on the outcomes of the survey, are highly unlikely to occur.

MSEC (2019:110) provided a summary of the maximum predicted values of total vertical subsidence, tilt and curvature for the Aboriginal archaeological sites within the Project Area (refer to **Table 8.1**).



Legend

Subsidence contours

Project Area

- 1 - Newstan Colliery Surface Site
- 2 - Extension of Mining Area
- 3 - Forest Road Ballast Borehole and Services Site
- Unassessed Area
- Newstan Mine Project Application Area

FIGURE 8.1

Subsidence

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Table 8.1 Maximum Predicted Total Vertical Subsidence within 20 metres of Existing Sites (taken from MSEC 2019:110)

Site AHIMs	Site Type	Location	Maximum predicted total vertical subsidence (mm)	Maximum predicted total tilt (mm/m)	Maximum predicted total hogging curvature (km^{-1})	Maximum predicted total sagging curvature (km^{-1})	Expected Impacts
45-7-0300	Isolated Artefact	Directly above proposed mining area	500	80	> 3.0	> 3.0	Potential impacts from cracking of surface soils or through required surface remediation works
45-7-0070	Isolated Artefact/ Midden	Outside of direct impacts	Not provided	Not provided	Not provided	Not provided	No adverse impacts are anticipated
45-7-0301	Isolated Artefact	Directly above proposed mining area	2250	12	0.07	0.50	Potential impacts from cracking of surface soils or through required surface remediation works
45-7-0302	Isolated artefact	Directly above proposed mining area	1250	75	> 3.0	> 3.0	Potential impacts from cracking of surface soils or through required surface remediation works
45-7-0318	Modified Tree (scarred or carved)	Directly above proposed mining area	1850	95	> 3.0	> 3.0	Unlikely to be adversely impacted by mining activities except where depths of cover are 50 m or less, or on very steeply sloping terrain
45-7-0319	Modified Tree (scarred or carved)	Directly above proposed mining area	250	2.5	< 0.01	0.07	Unlikely to be adversely impacted by mining activities except where depths of cover are 50 m or less, or on very steeply sloping terrain
45-7-0324	Modified Tree (scarred or carved)	Outside of direct impacts	< 20	< 0.5	< 0.01	< 0.01	No adverse impacts are anticipated

As indicated by MSEC (2019:110-111), the recorded artefact scatters/isolated artefacts (with the exception of 45-7-0070) may be indirectly impacted as a result of surface cracking and subsequent remediation (if required). It is noted that these impacts are identifiable based on monitoring of subsidence outcomes. That is, monitoring of the sites will allow for the identification of the occurrence of cracking and potential mitigation of its impacts.

The sites recorded as scarred trees are unlikely to be impacted unless depths of cover are less than 50 m (noting that none of these sites were recorded on steep slopes). Again, if impacts are to occur to these sites, monitoring of the sites will allow for the identification of these impacts and potential mitigation, if required.

Based on the above considerations, the project is unlikely to result in direct impacts to the Aboriginal archaeological sites present within the Project Area and the risk of indirect impacts to these sites is also low and can be mitigated. In addition, based on the outcomes of the survey, the Project Area is generally assessed as having low archaeological potential. This indicates that any further archaeological sites that may be present are likely to be similar to those already identified (both in distribution and site content), with the same potential for direct or indirect impact. Furthermore, surface impacts are limited to areas of no to low archaeological potential that do not contain recorded sites and therefore are also unlikely to result in harm to Aboriginal objects.

9.0 Management and Mitigation Strategies

The Project Area contains seven previously identified and registered Aboriginal objects, five of which are located in areas that will be subject to impact from underground mining and one which appears to be destroyed or disturbed as a result of the construction of the Eraring Ash Dam. The below management strategies reflect the outcomes of the assessment and in-field consultation with the registered Aboriginal party representatives.

9.1 Management Strategies

Management Strategy 1- Conservation

A management strategy would involve the conservation of the Project Area, necessitating the proposed works to take place in another location. While the proposed works may have an impact to the recorded archaeological sites, these impacts have been assessed as low, and when considered against the low archaeological potential of the Project Area and the degree of previous disturbance across the area, this strategy is not considered to be an appropriate course of action.

It is noted that an Aboriginal Cultural Heritage Management Plan (ACHMP) currently exists for Centennial Coal's Northern Region, under which the Project Area is managed. This ACHMP makes provision for the conservation and management of surface Aboriginal sites which protects these from ground surface disturbances associated with the Newstan Mine operations. These protective measures are conducted regardless of and outside of any conservation and management recommendations listed here.

Management Strategy 2- Further Investigation

Strategy 2 involves undertaking further investigation to clarify the nature, extent and significance of the potential archaeological resource of the Project Area.

Based on the previously discussed low archaeological potential of the Project Area, this strategy is not considered to be necessary, nor was the need for further investigation raised by any of the Aboriginal representatives who participated in the survey.

Management Strategy 3- Impacts with Salvage

Strategy 3 involves undertaking salvage works within the Project Area, which includes activities such as post clearance inspection and collection of artefacts exposed during sub-surface disturbance (if present). This strategy allows for the recovery of identified Aboriginal objects and also provides the opportunity to ensure that any additional objects within the Project Area can be collected and documented.

The extant Aboriginal sites present across the Project Area consist of three culturally modified trees, and four artefact sites which could be relocated during the field inspection. The salvage of the existing Aboriginal sites is not recommended due to the nature of the proposed works, which have been assessed as having a low potential for harm and which will cause minimal ground disturbance across the Project Area, and the low archaeological potential of the remainder of the Project Area. It is noted that provision is made in the Centennial Coal Northern Region ACHMP for the salvage of sites, should subsidence impacts trigger a requirement to salvage.

Management of the Aboriginal sites through salvage was not suggested or raised by any of the Aboriginal representatives who participated in the survey.

Management Strategy 4- Impacts without Salvage

Strategy 4 would involve proceeding with the project.

As discussed above, the Project Area is assessed as having low archaeological potential, and the Aboriginal objects currently present within the Project Area are relatively robust site types. Salvaging these objects (such as culturally modified trees) would result in more damage being caused than that predicted based on likely levels of subsidence. From an archaeological perspective it is therefore justifiable to undertake the project without conducting salvage activities, noting that, where monitoring works identified likely impacts from subsidence, provision to salvage sites may be made as discussed above.

No objection to this management strategy were raised by any of the Aboriginal representatives who participated in the survey. No alternative suggestions or recommendations were raised by any of the Aboriginal representatives who participated in the survey.

10.0 Recommendations

The following recommendations have been developed in light of the archaeological context of the region, the findings of previous archaeological assessments of the Project Area, the potential impacts of the proposed works, and the outcomes of consultation with the registered Aboriginal parties.

10.1 Aboriginal Party Recommendations

The recommendation below was provided by the Wonnaruah Nation Aboriginal Corporation:

- On the back of the recent devastating bushfires in the Newcastle region, it is requested that consideration be given to conducting cool cultural burns across the Project Area to minimise the risk of future hazards. There is a preference for this work to be conducted by Indigenous businesses, or Aboriginal people with relevant cultural burning knowledge.

10.2 Archaeological Recommendations

- There is no requirement for any further archaeological investigation of the Project Area prior to the commencement of works. In the event that a previously unrecorded Aboriginal object is identified within the Project Area, it will be managed in accordance with the Centennial Coal Northern Region ACHMP protocols.

- Centennial Newstan must ensure that all parties involved in the project are aware that it is an offence under Section 86 of the NPW Act to harm or desecrate an Aboriginal object unless that harm or desecration is authorised by an approved ACHMP as applicable, and the requirements of that plan have been met in relation to mitigation activities.

- The proposed mine extension is unlikely to result in harm to identified Aboriginal objects or areas of Aboriginal archaeological potential, however provisions exist in the existing the Centennial Coal Northern Region ACHMP to monitor and manage the effects of subsidence on existing or newly identified Aboriginal sites. It is recommended that this subsidence monitoring continue to be conducted on all Aboriginal sites present across the Project Area as appropriate, to identify any potential adverse impacts to these sites in a timely manner.

- Based on discussions held in the field during the revisit of previously recorded AHIMS sites, it is recommended that the three modified trees present over the Project Area (AHIMS 45-7-0324, 45-7-0318 and 45-7-0319) have their site cards amended and the status of these sites changed to ‘Not a Site’.

- It is recommended that previously recorded AHIMS site 45-7-0070 have its site card amended and its status changed to ‘Destroyed’ or ‘Partially Destroyed’ based on the desktop assessment which indicated the site has been subject to disturbance through the establishment of the Eraring Power Station, and the site card which notes that the stone artefacts within this site have been previously collected.

11.0 References

Archaeology Australia, 2007. Newstan Colliery: Modification to Development Consent. Statement of Environmental Effects. Non-Indigenous Heritage Impact Assessment. Prepared for Hansen Baily on behalf of Centennial Coal Company.

Blyton, G., 2015, Hungry Times: Food as a source of conflict between Aboriginal people and British colonists in New South Wales 1804-1846. AlterNative: An International Journal of Indigenous Peoples, vol. 11, #3.

Brayshaw, H., 1994, National Highway Extension F3 to New England Highway at Branxton, Hunter Valley, NSW. Unpublished report to RTA through Connell Wagner Pty Ltd.

Centennial Coal, 2019, Newstan Mine Extension Project Scoping Report.

Clack, E.W., 1977, Early History of Toronto. Lake Macquarie, Lake Macquarie and District Historical Society.

Department of Climate Change and Water. 2010a. Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.

Department of Climate Change and Water 2010b. Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (DECCW 2010).

Department of Climate Change and Water 2010c. Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales.

Hartley, D 1998, Lake Macquarie Memories, Dulcie Hartley, Fennell Bay

Indigenous Outcomes Pty Ltd (2007). Newstan Colliery Indigenous Community Consultation and Cultural Heritage Assessment Modifications to Development Consent Statement of Environmental Effects, Hansen Bailey on behalf of Centennial Coal Company.

Matthei, L. E. (1995). Soil Landscapes of Newcastle 1:100 000 Sheet. Sydney, Department of Land and Water Conservation

MSEC, 2019, *Newstan Colliery: Mine Extension Project. Environmental Impact Statement. Subsidence Predictions and Impact Assessments for Natural and Built Features due to the proposed 201 to 218 Panels in Support of the Environmental Impact Statement.* Prepared for Centennial Coal Newstan.

Nilsen, L. (ed.), 1985, Lake Macquarie: Past & Present, Lake Macquarie City Council.

Office of Environment and Heritage. 2011. Guide to investigating, assessing, and reporting on Aboriginal Cultural Heritage in NSW.

Reeves, J. and Coulter, N., 2006, Aboriginal Archaeological Heritage Assessment, November 2006, Archaeological Survey for Aboriginal Heritage Sites: Proposed Third Hunter River Crossing, Maitland, New South Wales, A report prepared for the NSW Roads and Traffic Authority by Biosis Research, November 2006, New South Wales.

RPS, 2010, Cultural Heritage Impact Assessment for Awaba Colliery

RPS, 2012, Aboriginal and European Cultural Heritage Assessment. Newstan Colliery SMP, Centennial Newstan, NSW.

RPS, 2013, Cultural Heritage Impact Assessment for Newstan Extension of Mining Projects. Prepared for Centennial Coal.

RPS, 2016, Aboriginal Cultural Heritage Management Plan- Northern Region. Prepared for Centennial Coal.

Stinson, E. 1994a, A Pictorial History of Wyong Shire, Volume 1, Museum Group and Historical Society. 1994b, A Pictorial History of Wyong Shire, Volume 3, Museum Group and Historical Society.

Suters, Turner & Doring, 1993, City of Lake Macquarie Heritage Study, report to Lake Macquarie City Council.

Threlkeld, LE., 1892, *An Australian language as spoken by the Awabakal: the people of Awaba and Lake Macquarie: being an account of language, traditions and customs.* Re-arranged, condensed and edited by J. Fraser, Government Printer, Sydney.

Topographic Map Sheet Swansea 92314N (2006). Topoview. Sydney, Department of Lands.

Umwelt Pty Ltd, 1998, Newstan Colliery Life Extension Project, report to Powercoal.

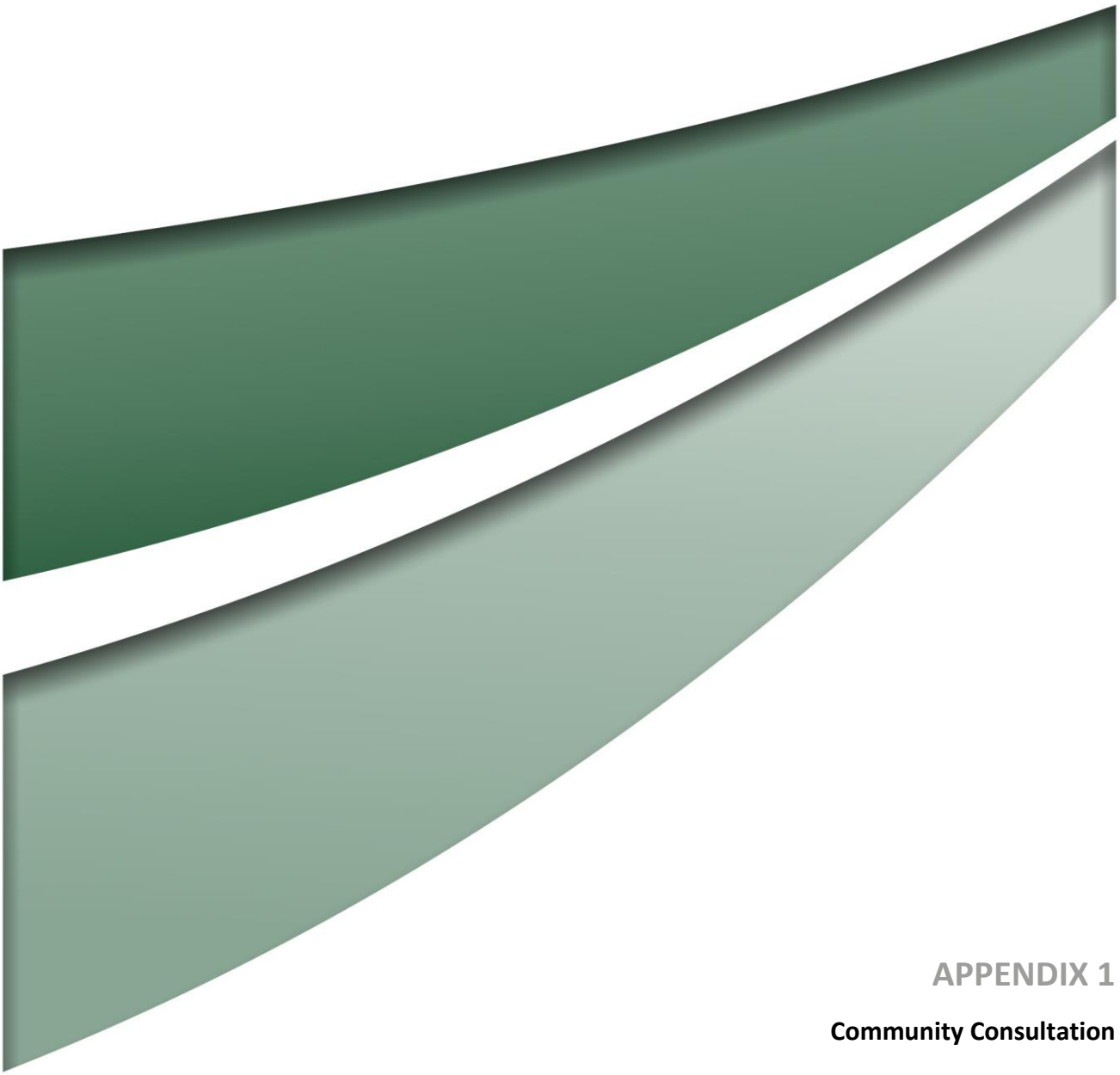
Umwelt 2004.Centennial Newstan Longwalls 22-23: Archaeological survey and Assessment. A report prepared for Centennial Coal.

Umwelt (Australia), 2011, Sustainable Management of Aboriginal Cultural Heritage in the Lake Macquarie Government Area: Lake Macquarie Aboriginal Heritage Management Strategy. Prepared for Lake Macquarie City Council, August 2011.

Umwelt 2017, Heritage Constraints Assessment: Rail Corridor, Bath Street and Toronto Row, Toronto, NSW. Report Prepared for Lake Macquarie City Council

Umwelt, 2020, Proposed Newstan Mine Extension Project (SSD 10333), Lake Macquarie, NSW. Historical Heritage Assessment (in process).

Virtus Heritage, 2019, *4 Merewether Street, Newcastle, NSW- Proposed Affordable Housing. FINAL Aboriginal Cultural Heritage Assessment.*



APPENDIX 1

Community Consultation

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/26072019

26 July 2019

Biraban Local Aboriginal Land Council
9 Thorne Street
Toronto NSW 2283

Email: ceo@birabanlalc.com.au

Dear Sir/Madam

Re: Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by the Centennial Coal Company Ltd (Centennial) to prepare an Aboriginal Cultural Heritage Assessment (ACHA) that addresses the requirements of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a), *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010c) and *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011). The ACHA relates to the proposed extension of the existing Newstan Mine via the continuation of underground mining within the West Borehole seam. The area of proposed works is shown in **Figure 1**.

Should it be necessary, it is intended that the ACHA will support any potential application for an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the *National Parks and Wildlife Act 1974*. In preparing the Aboriginal cultural heritage assessment, Umwelt (on behalf of Centennial) will be undertaking Aboriginal community consultation in accordance with the Office of Environment and Heritage's (OEH) *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010). This consultation will inform the Aboriginal cultural heritage assessment and will assist the Director General of the OEH in his or her consideration and determination of any AHIP application or other approval.

In accordance with Section 4.1.2 of the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010), Umwelt are seeking to identify Aboriginal people or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places within the project area. If your organisation is aware of any such Aboriginal people or groups who you think may want to be involved in the project, please forward the relevant contact details by no later than **12 August 2019** to:

Karyn Virgin
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In compliance with the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) the contact details for the relevant Project Manager are as follows:

Iain Hornshaw
Approvals Coordinator
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If you have any questions regarding this correspondence or wish to discuss the proposed project further, please do not hesitate to contact myself via email or on 02 4950 5322.

Yours sincerely



Karyn Virgin
Senior Archaeologist

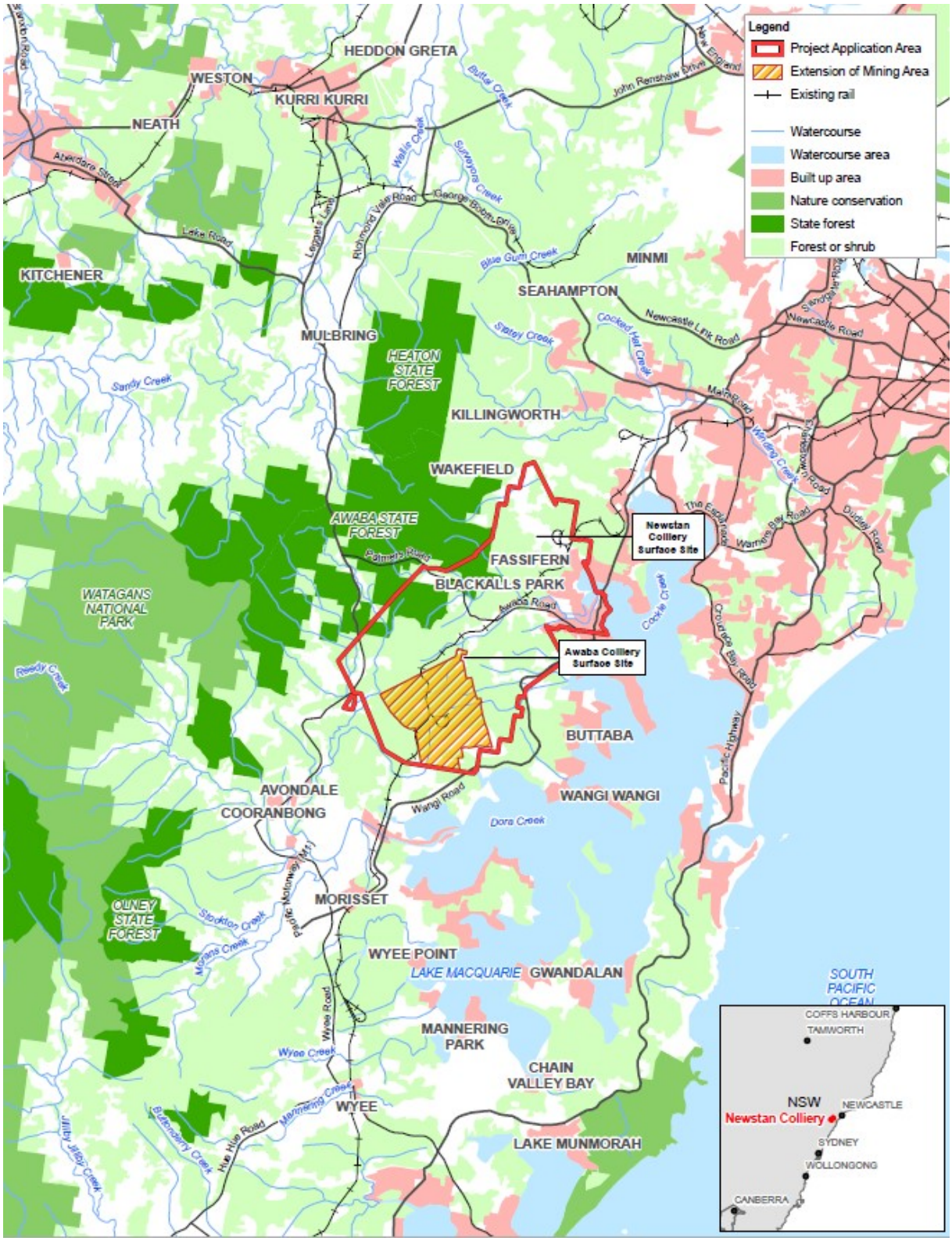


Figure 1 Area of proposed works (indicated as "Extension of Mining Area" in legend)
Source: GHD 2019

umwelt
Environmental & Social Consultants

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/26072019

26 July 2019

Lake Macquarie City Council
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Email: council@lakemac.nsw.gov.au

Dear Sir/Madam

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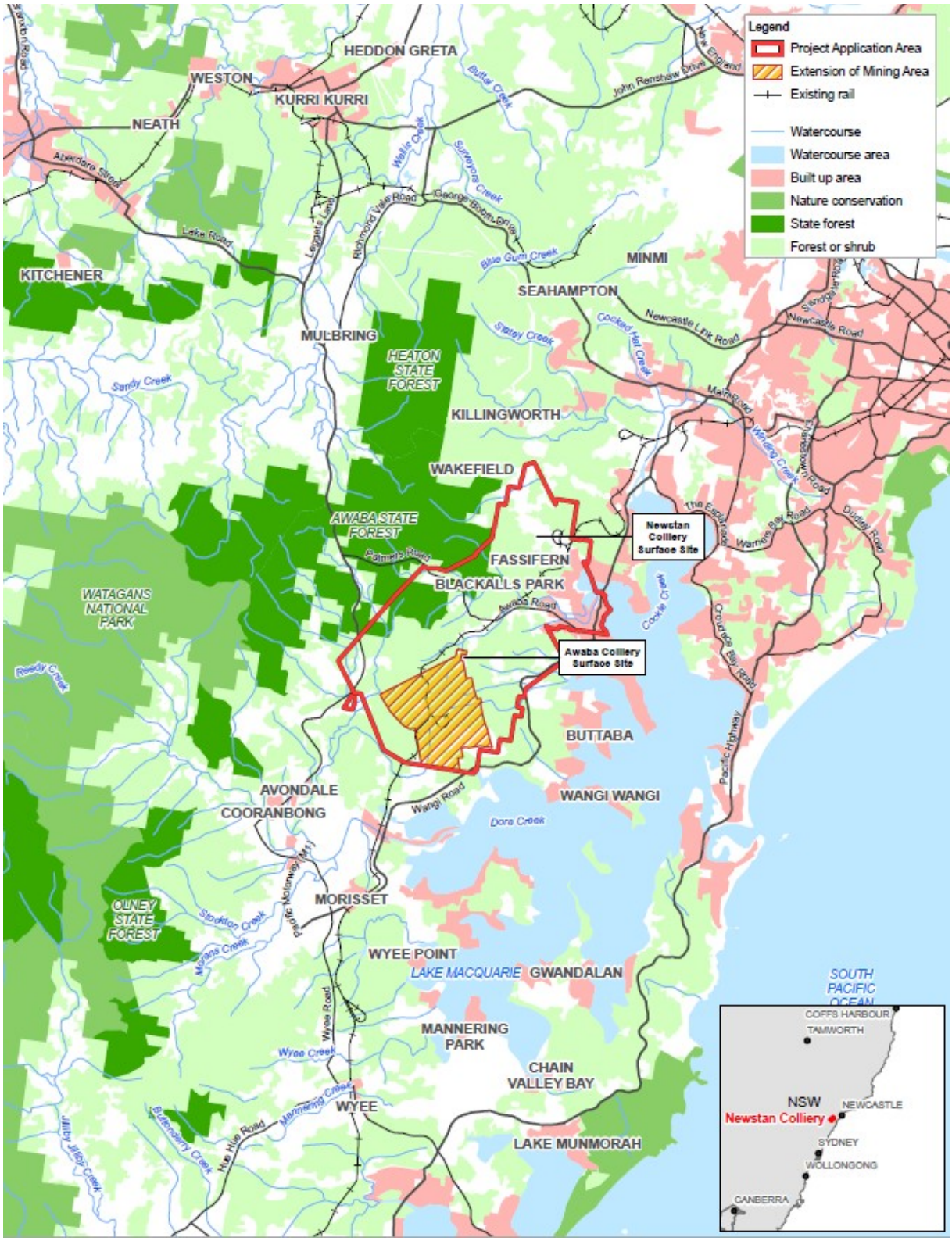


Figure 1 Area of proposed works (indicated as "Extension of Mining Area" in legend)
Source: GHD 2019

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26 July 2019

National Native Title Tribunal
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Sydney NSW 2001

Email: enquiries@nntt.gov.au

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E: Iain.Hornshaw@centennialcoal.com.au

If you have any questions regarding this correspondence or wish to discuss the proposed project further, please do not hesitate to contact myself via email or on 02 4950 5322.

Yours sincerely



Karyn Virgin
Senior Archaeologist

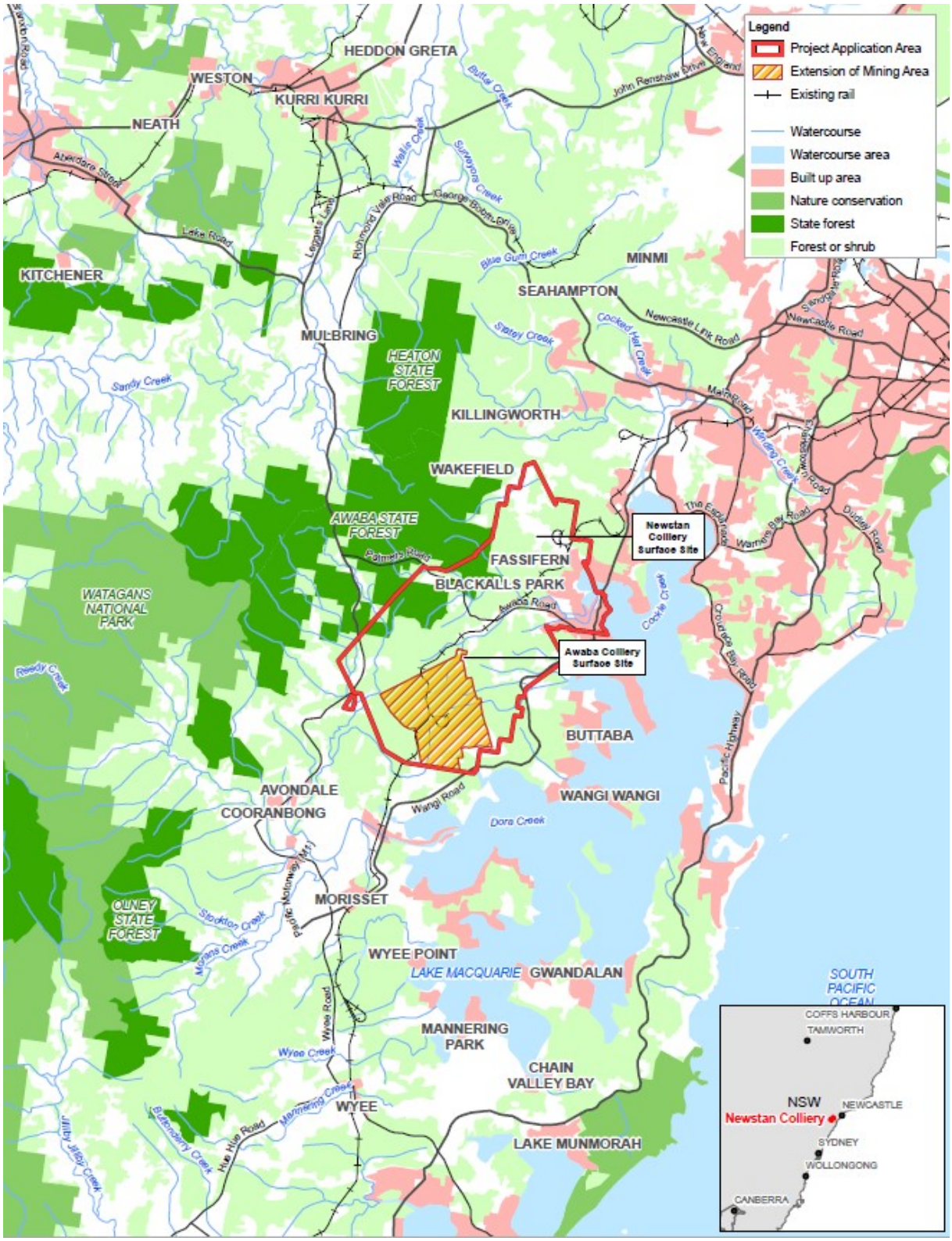


Figure 1 Area of proposed works (indicated as "Extension of Mining Area" in legend)
Source: GHD 2019

umwelt
Environmental & Social Consultants

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/26072019

26 July 2019

NSW Local Land Services
Hunter Region - Paterson Office
816 Tocal Road (Private Bag 2010)
Paterson NSW 2421

Email: admin.hunter@lls.nsw.gov.au

Dear Sir/Madam

Re: Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by the Centennial Coal Company Ltd (Centennial) to prepare an Aboriginal Cultural Heritage Assessment (ACHA) that addresses the requirements of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a), *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010c) and *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011). The ACHA relates to the proposed extension of the existing Newstan Mine via the continuation of underground mining within the West Borehole seam. The area of proposed works is shown in **Figure 1**.

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Karyn Virgin
75 York Street
Teralba NSW 2284

E: kvirgin@umwelt.com.au

Newcastle
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Teralba NSW 2284

Perth
Level 1
12 Prowse Street
West Perth WA 6005
PO Box 783
West Perth WA 6872

Canberra
2/99 Northbourne Avenue
Turner ACT 2612
PO Box 6135
O'Connor ACT 2602

Sydney
Level 3
50 York Street
Sydney, NSW, 2000

Brisbane
Level 13
500 Queen Street
Brisbane QLD 4000

Orange
Office 1
3 Hampden Avenue
Orange NSW 2800

T| 1300 793 267
E| info@umwelt.com.au
www.umwelt.com.au

Umwelt (Australia) Pty Limited
ABN: 18 059 519 041

In compliance with the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) the contact details for the relevant Project Manager are as follows:

Iain Hornshaw
Approvals Coordinator
Centennial Coal Company Limited | Fassifern
PO Box 1000
TORONTO NSW 2283
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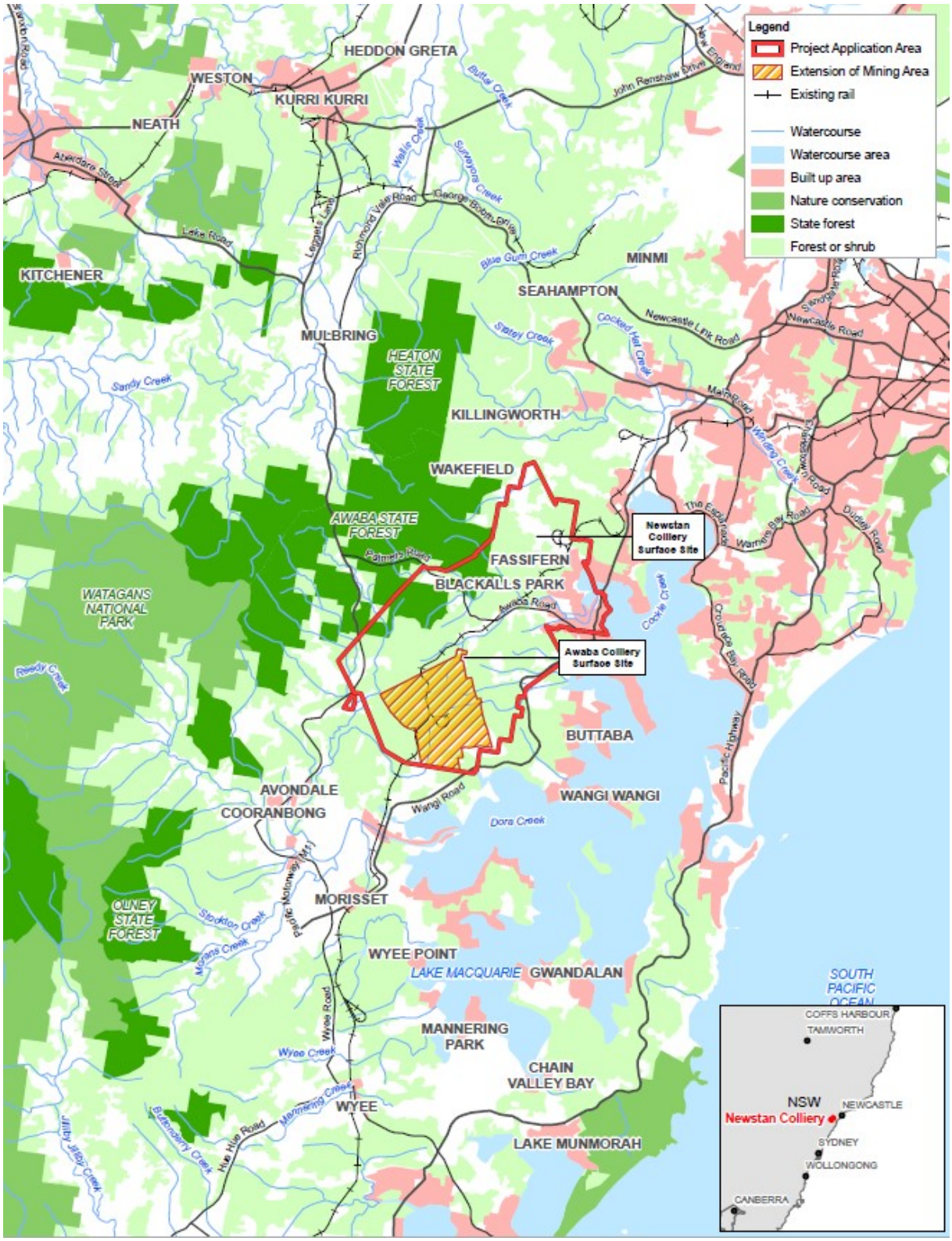


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Our Ref: 4660/NR/KV/26072019

26 July 2019

NTSCORP Ltd
PO Box 2105
Strawberry Hills NSW 2012

Email: information@ntscorp.com.au

Dear Sir/Madam

Re: Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

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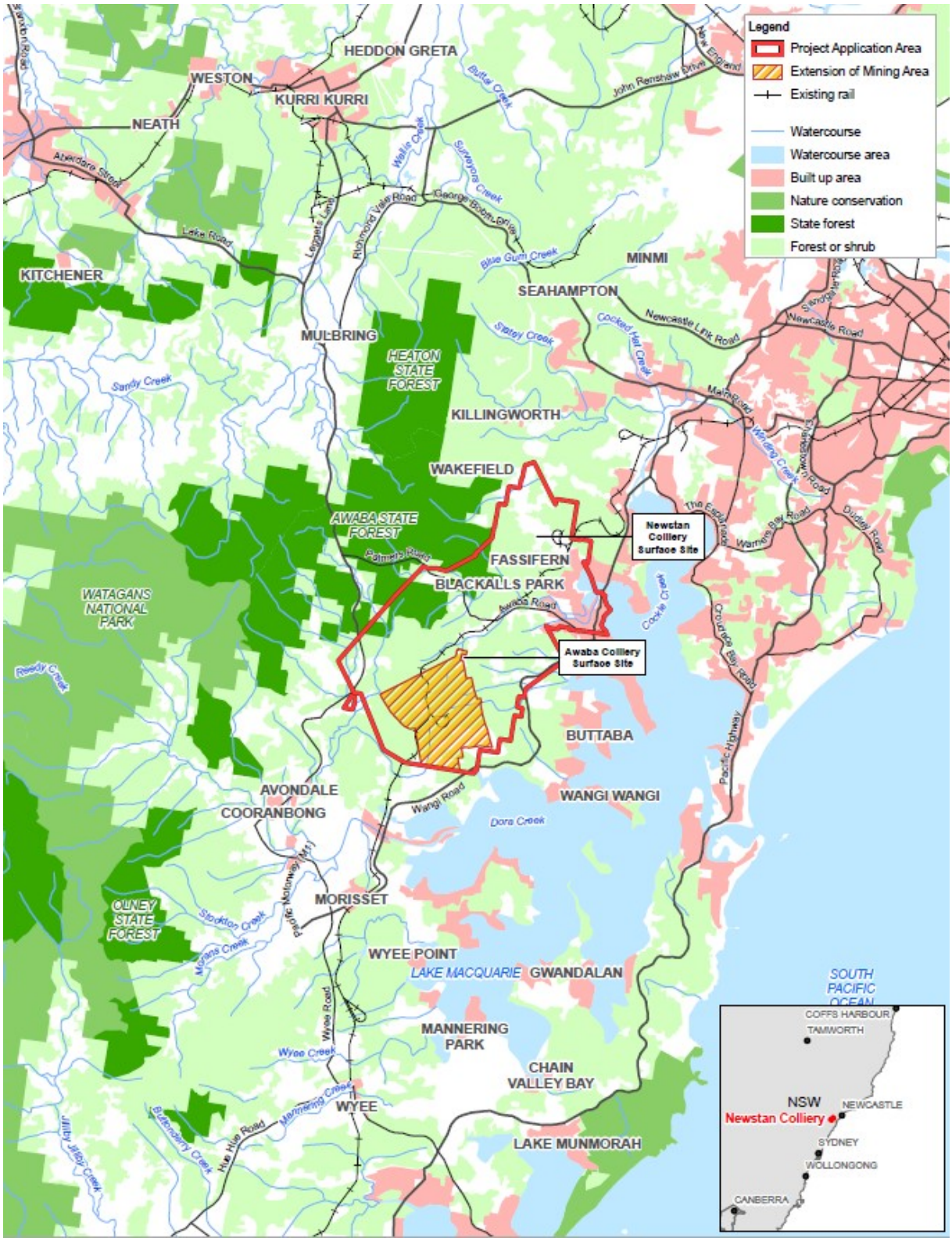


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Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/26072019

26 July 2019

Office of Environment and Heritage
Senior Team Leader, Planning
Locked Box 1002
Dangar NSW 2307

Email: rog.hcc@environment.nsw.gov.au

Dear Sir/Madam

Re: Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

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ABN: 18 059 519 041

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Iain Hornshaw
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PO Box 1000
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Karyn Virgin
Senior Archaeologist

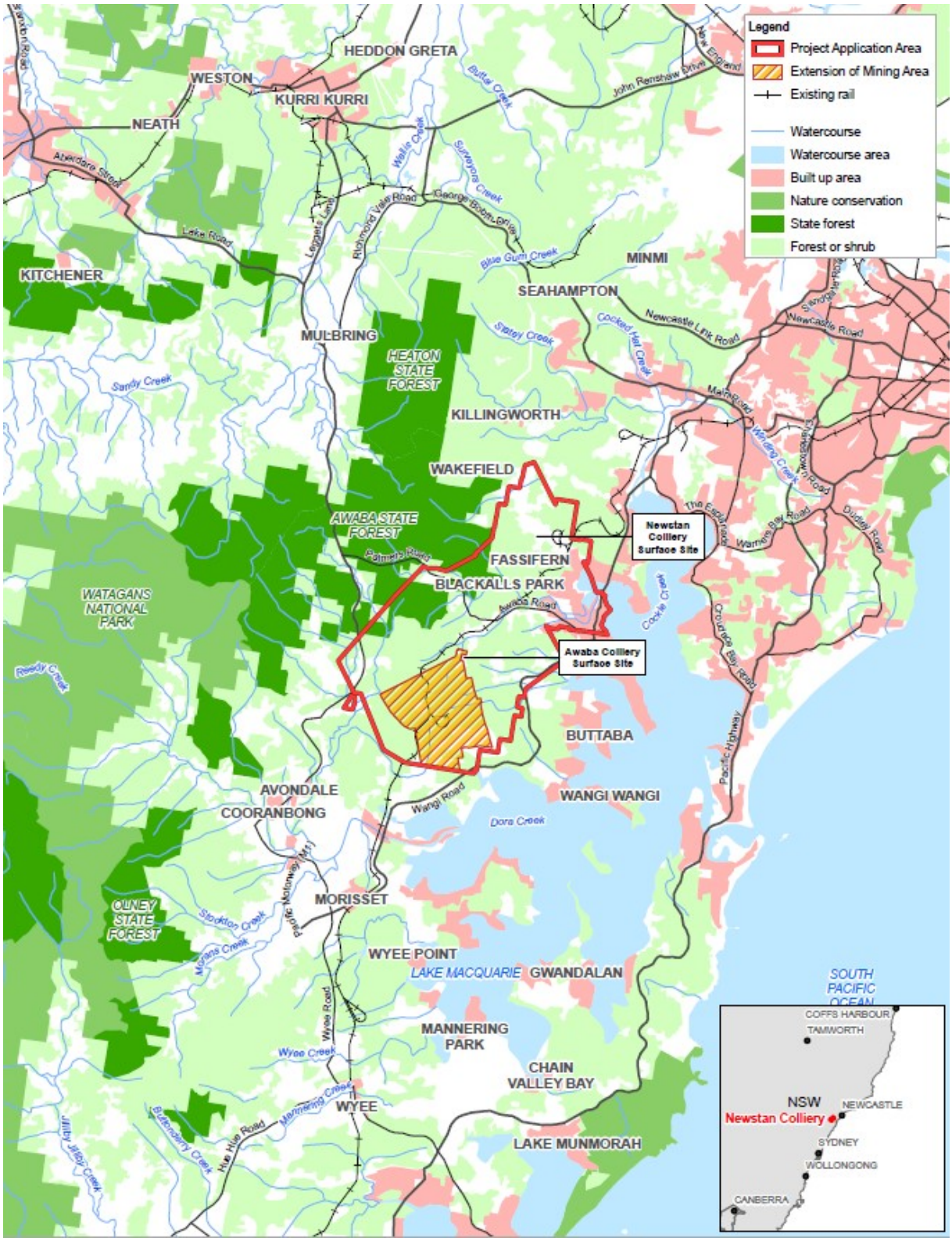


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Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/26072019

26 July 2019

Office of the Registrar
Aboriginal Land Rights Act 1983 (NSW)
PO Box 112
Glebe NSW 2037

Email: adminofficer@oralra.nsw.gov.au

Dear Sir/Madam

Re: Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

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ABN: 18 059 519 041

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Approvals Coordinator
Centennial Coal Company Limited | Fassifern
PO Box 1000
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E: Iain.Hornshaw@centennialcoal.com.au

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Senior Archaeologist

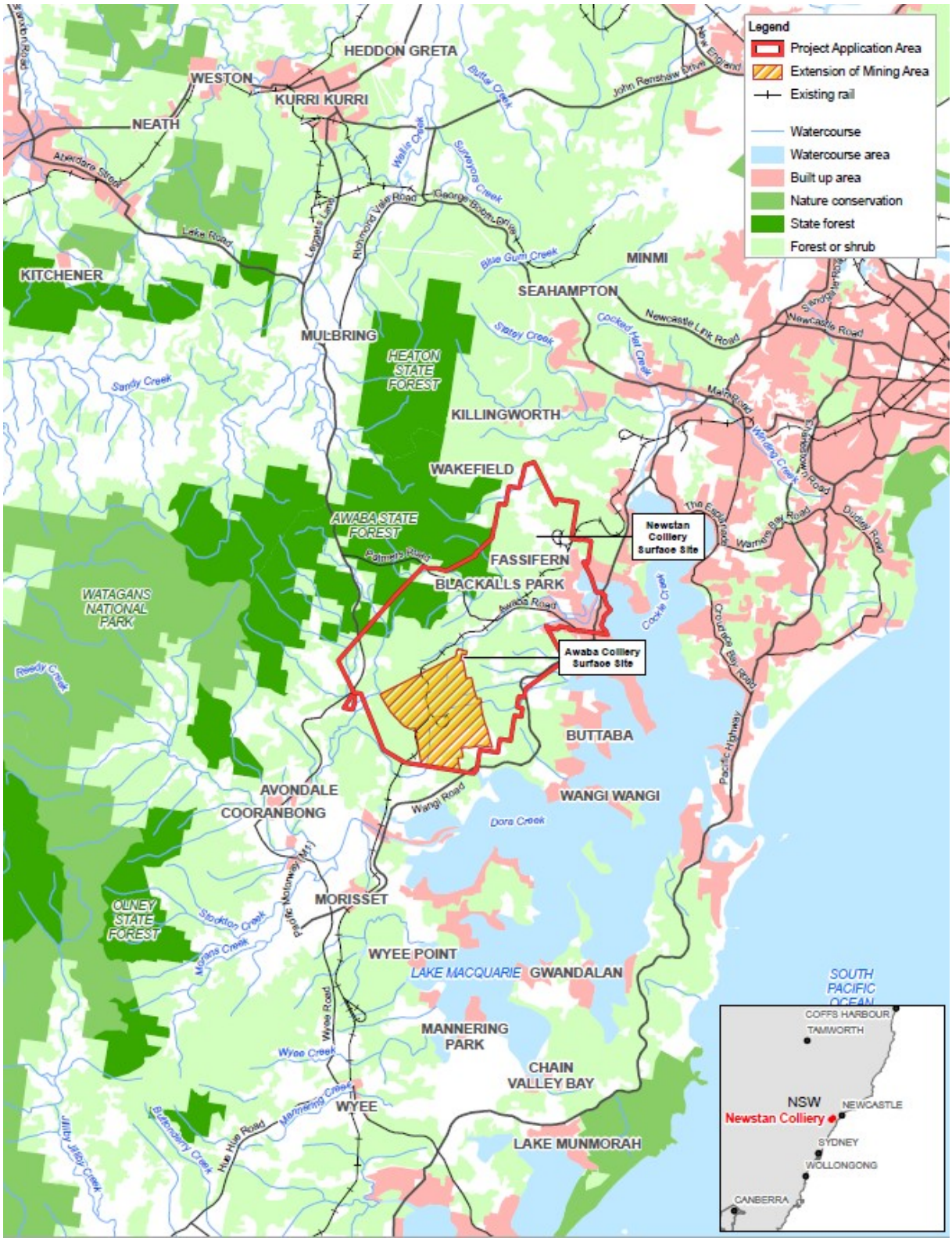


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Source: GHD 2019

National Native Title Tribunal

Request for Search of Tribunal Registers

Search for overlapping interests i.e.: Is there a native title claim, determination or land use agreement over this land?
Please note: the NNTT cannot search over freehold land.
For further information on freehold land: Click Here (NNTT website)

1. Your details

NAME:	Amanda Crick
POSITION:	Archeaologist
COMPANY/ORGANISATION:	Umwelt
POSTAL ADDRESS:	75 York Street, Teralba NSW 2284
TELEPHONE:	02 4950 5322
EMAIL:	acrick@umwelt.com.au
YOUR REFERENCE:	4660 Newstan
DATE OF REQUEST:	29/7/2019

2. Reason for your request

Are you a party to a native title proceeding? ☐ Yes ☒ No

Please provide Federal Court/Tribunal file number/or application name: _____

OR

Do you need to identify existing native title interests to comply with the *Native Title Act 1993* (Cth) or other State/Territory legislation? ☒ Yes ☐ No

Please provide brief details of these obligations here: _____

3. Identify the area to be searched

If there is insufficient room below, please send more information on a Word or Excel document.

Mining tenure

State/Territory: _____

Tenement ref/s: _____

OR

Crown land / non-freehold tenure

Tenure type: ☒ Lease ☐ Reserve or other Crown land

State/Territory: Lake Macquarie NSW

Lot and plan details: Centennial Coal Newstan Colliery

Pastoral Lease number or name: _____

Other details: (Town/County/Parish/ Section/Hundred/Portion): _____

Email completed form to: GeospatialSearch@nntt.gov.au

Jessica Blackman

From: Karyn Virgin
Sent: Wednesday, 14 August 2019 2:27 PM
To: Amanda Crick
Subject: FW: Biraban LALC Register Interest - Proposed Newstan Mine Extension Project, Lake Macquarie NSW

Karyn Virgin
Senior Heritage Consultant/Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284
Phone: (02) 4950 5322

www.umwelt.com.au

Inspired People | Dedicated Team | Quality Outcomes

Newcastle ph. 02 4950 5322 | Perth ph. 08 6260 0700 | Canberra ph. 02 6262 9484 | Sydney ph. 1300 793 267 | Brisbane ph. 1300 793 267

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Please consider the environment before printing this email

-----Original Message-----
From: Ashley Williams <ceo@birabanlalc.com.au>
Sent: Wednesday, 14 August 2019 11:47 AM
To: Karyn Virgin <kvirgin@umwelt.com.au>
Subject: Biraban LALC Register Interest - Proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Karyn,

Biraban LALC would like to register our interest in the proposed Newstan Mine Extension Project, Lake Macquarie NSW. We represent a great portion of the local Aboriginal community within the Westlake Macquarie area and all of our sites officers hold cultural knowledge relevant to Lake Macquarie.

Thank you

Kind Regards

Ashley Williams

Chief Executive Officer

Mob: 0422 288 537

Phone: (02) 4950 4806

Address: 9 Thorne Street, Toronto NSW 2283

(Monday, Tuesday, Wednesday & Friday)

I acknowledge and pay respect to Elders past and present and the traditional owners of the land we work.

Jessica Blackman

From: Geospatial Search Requests <GeospatialSearch@NNTT.gov.au>
Sent: Tuesday, 30 July 2019 6:18 PM
To: Amanda Crick
Cc: Karyn Virgin
Subject: RE: SR6124 - 4660 Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW - SR6124
Attachments: 20190730_SR6124_NSW_Lake_Macquarie_City_Council__LGA_Overlap_Report.xlsx

UNCLASSIFIED

Native title search – *NSW LGA – Lake Macquarie City Council*
Your ref: *4660 Newstan* - **Our ref:** *SR6124*

Dear Amanda Crick,

Thank you for your search request received on 29 July 2019 in relation to the above area, please find your results attached.

Search Results
The results provided are based on the information you supplied and are derived from a search of the following Tribunal databases:

- Schedule of Native Title Determination Applications
- Register of Native Title Claims
- Native Title Determinations
- Register of Indigenous Land Use Agreements
- Notified Indigenous Land Use Agreements

For more information about the Tribunal's registers or to search the registers yourself and obtain copies of relevant register extracts, please visit our website.

Please note: There may be a delay between a native title determination application being lodged in the Federal Court and its transfer to the Tribunal. As a result, some native title determination applications recently filed with the Federal Court may not appear on the Tribunal's databases.

The search results are based on analysis against external boundaries of applications only. Native title applications commonly contain exclusions clauses which remove areas from within the external boundary. To determine whether the areas described are in fact subject to claim, you need to refer to the "Area covered by claim" section of the relevant Register Extract or Schedule Extract and any maps attached.

Search results and the existence of native title
Please note that the enclosed information from the Register of Native Title Claims and/or the Schedule of Applications is **not** confirmation of the existence of native title in this area. This cannot be confirmed until the Federal Court makes a determination that native title does or does not exist in relation to the area. Such determinations are registered on the National Native Title Register.

The Tribunal accepts no liability for reliance placed on enclosed information

The enclosed information has been provided in good faith. Use of this information is at your sole risk. The National Native Title Tribunal makes no representation, either express or implied, as to the accuracy or suitability of the information enclosed for any particular purpose and accepts no liability for use of the information or reliance placed on it.

If you have any further queries, please do not hesitate to contact us on the free call number 1800 640 501.

Regards,

Geospatial Searches
National Native Title Tribunal | Perth
Email: GeospatialSearch@nntt.gov.au **| www.nntt.gov.au**

From: Amanda Crick <acrick@umwelt.com.au>
Sent: Monday, 29 July 2019 1:36 PM
To: Geospatial Search Requests <GeospatialSearch@NNTT.gov.au>
Cc: Karyn Virgin <kvirgin@umwelt.com.au>
Subject: SR6124 - 4660 Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Goodafternoon,
Requesting information on Native Title associated with our project area, as requested the search form has been filled out and attached.

Kind Regards

Amanda Crick
Archaeologist
(Monday-Wednesday)

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0436 613 948

www.umwelt.com.au

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Newcastle ph. 02 4950 5322 | **Perth** ph. 08 6260 0700 | **Canberra** ph. 02 6262 9484 | **Sydney** ph. 1300 793 267 | **Brisbane** ph. 1300 793 267

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Please consider the environment before printing this email

Our ref: DOC19/643740-1
Senders ref: 4660/NR/KV/26072019

Ms Karyn Virgin
Senior Archaeologist
Umwelt
75 York Street
Teralba NSW 2284

kvirgin@umwelt.com.au

Dear Ms Virgin

Newstan Mine Extension Project– Aboriginal Stakeholder List – Lake Macquarie City Council LGA

In response to your request under Section 4.1.2(a) of the Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010), please find attached a list of known Aboriginal parties that have self-nominated for Lake Macquarie City Council Local Government Area (LGA). Please note the following information with respect to Aboriginal consultation for your project.

Aboriginal stakeholder lists maintained by the Department are comprised of self-nominated individuals and organisations

Please note that the attached list is comprised only of self-nominated individuals and Aboriginal organisations who could have an interest in your project. The list is not vetted by the Biodiversity and Conservation Division (BCD) of the Department of Planning, Industry and Environment (the Department). As the list comprises only of self-nominated individuals and Aboriginal organisations, it is not necessarily an exhaustive list of all Aboriginal parties who may hold an interest in the project. Further consultation in accordance with step 4.1.2 of the Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010) is required to identify Aboriginal people who may hold either cultural or historical knowledge relevant to determining the significance of Aboriginal objects or places within your proposed project area.

Aboriginal stakeholder lists may cover multiple Local Aboriginal Land Council boundaries

Please note that the attached list may contain two or more Local Aboriginal Land Councils (LALCs) that occur in the LGA. Please review the boundary of your specific project area and ensure you consult with all LALC(s) that overlap with your project area. The Department does not require you to contact any LALCs on the attached list that you determine are wholly located outside your project area.

Ensure you document the consultation process

Please ensure all consultation undertaken in accordance with the Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010) is documented within an Aboriginal Cultural Heritage Assessment Report (ACHAR). This must include copies of all correspondence sent to or received from all Registered Aboriginal Parties (RAPs) throughout the entire consultation process. Omission of these records in the final ACHAR may cause delays in the assessment of an

Aboriginal Heritage Impact Permit (AHIP) application or a major project Aboriginal cultural heritage assessment, and could require parts of the consultation process to be repeated if the evidence provided to the Department does not demonstrate that the consultation process has been conducted in accordance with our consultation requirements.

Demonstrate that reasonable consultation attempts have been made

Please ensure you provide evidence to demonstrate that reasonable attempts have been made to contact the relevant parties identified through step 4.1.2 of the Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010). If this evidence is not provided, the Department may deem that the consultation process has not complied with the consultation requirements. Similarly, the proponent is required to record all feedback received from RAPs, along with the proponent's response to the feedback. Where concerns or contentious issues are raised by RAPs during the consultation process, the Department expects that reasonable attempts are made to address and resolve these matters, however the Department acknowledges that in some cases, this may not be achievable. In the case where conflict cannot be resolved, it is the responsibility of the proponent to record these differences and provide the necessary information in their ACHAR with their AHIP application or major project ACHAR.

Consultation should not be confused with employment

As outlined in Section 3.4 of the Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010), the consultation process involves getting the views of, and information from, Aboriginal people and reporting on these. It is not to be confused with other field assessment processes involved in preparing a proposal and an application. The Department does not have any role with respect to commercial engagement. Where RAPs are engaged commercially to provide field services as part of an assessment process, that is a matter for the proponent to manage as they see fit. However, if a proponent is proposing to undertake consultation processes or elicit cultural information from RAPs during the course of conducting a field survey, the Department considers this to form part of the consultation process, and expects that all RAPs would be afforded the opportunity to be involved in the process.

Contacting our office

To ensure we can respond to enquiries promptly, please direct future correspondence to our central mailbox: rog.hcc@environment.nsw.gov.au.

Should you require any further information, please do not hesitate to contact us.

Yours sincerely



12 August 2019

STEVEN COX
Senior Team Leader Planning
Hunter Central Coast Branch
Biodiversity and Conservation Division

Enclosure: Attachment A

Attachment A

Hunter Central Coast Branch - Aboriginal Stakeholder List for Lake Macquarie City Council LGA

Organisation	First name	Surname	Address 1	City	State	Post code	Landline	Mobile	Email
A1 Indigenous Services	Carolyn	Hickey	10 Marie Pitt Place	GLENMORE PARK	NSW	2745		0411 650 057	Cazadirect@live.com
Aliera French Trading	Aliera	French	17 Kalinda St	BLACKSMITHS	NSW	2281		0421 299 963	alierafrenchtrading@outlook.com
Arwarbukarl Cultural Resource Association, Miromaa Aboriginal Language and Technology Centre	Darren	McKenny	840 Hunter St	NEWCASTLE WEST	NSW	2302	02 4940 9100		contact@acra.org.au
Awabakal & Guringai Pty Ltd	Tracey Howie	& Kerrie Brauer	PO Box 4061	WYONGAH	NSW	2259	Tracey Howie 0404 182 049	Kerrie Brauer 0412 866 357	traceyhowie@icloud.com, kerrie@awabakal.com.au
Awabakal Descendants Traditional Owners	Peter	Leven	PO Box 137	BUDGEWOI	NSW	2262		0405 149 684	awabakal.to@gmail.com
Awabakal Local Aboriginal Land Council	CEO		127 Maitland Road	ISLINGTON	NSW	2296	02 4965 4532		reception@awabakallalc.com.au
Awabakal Traditional Owners Aboriginal Corporation	Kerrie	Brauer	PO Box 122	RUTHERFORD	NSW	2320	-	0412 866 357	Kerrie@awabakal.com.au
Bahtabah Local Aboriginal Land Council	CEO		44 Pacific Highway	BLACKSMITHS	NSW	2281	-	02 4971 4800	bahtabahmick@hotmail.com
B-H Heritage Consultants	Nola Hampton, Darren Hampton & Raplh Hampton		95 Mount Ettalong Road	UMINA BEACH	NSW	2257		Nola 0401662531	kinghampton77@gmail.com (Nola), darrenhampton4@gmail.com (Darren), Hamptonralph46@gmail.com (Ralph)
Biraban Local Aboriginal Land Council	CEO		68/A Middlepoint Road	BOLTON POINT	NSW	2283	02 4959 1829		admin@birabanlalc.com.au
Corroboree Aboriginal Corporation	Carroll-Johnson	Marilyn	PO Box 3340	ROUSE HILL	NSW	2155	0288 244 324	0415 911 159	corroboreecorp@bigpond.com
Crimson-Rosie	Jeffery	Matthews	6 Eucalypt Avenue	MUSWELLBROOK	NSW	2333	02 6543 4791		
Daniella Chedzey, Jessica Wegener	Daniella	Chedzey	7 Grant Street	WINDERMERE PARK	NSW	2264		0413 508 066	daniellachedzey@yahoo.com.au

Organisation	First name	Surname	Address 1	City	State	Post code	Landline	Mobile	Email
Darkinjung Local Aboriginal Land Council	CEO		168 Pacific Highway	WATANOBBI	NSW	2259	02 4351 2930		darkinjung@dlalc.org.au
Deslee Talbott Consultants	Deslee	Matthews	Unit 2 / 19 South Street	GUNNEDAH	NSW	2380		0431 205 336	m-desley@hotmail.com
Didge Ngunawal Clan	Paul Boyd	& Lilly Carroll	7 Siskin St	QUAKERS HILL	NSW	2763		0426 823 944	didgengunawalclan@yahoo.com.au
Divine Diggers Aboriginal Cultural Consultants	Deidre	Perkins	6 Ashleigh Street	HEDDON GRETA	NSW	2321	02 4937 4573	0425 654 290 (preferred)	dedemaree3@hotmail.com
Gidawaa Walang & Barkuma Neighbourhood Centre Inc.	Craig Horne	Debbie Dacey-Sullivan	76 Lang Street	KURRI KURRI	NSW	2327	02 4937 1094	Craig 0432 336 163	gidawaa.walang@hotmail.com
Guringai Tribal Link Aboriginal Corporation	Tracey	Howie	PO Box 4061	WYONGAH	NSW	2259	02 4396 8743	0404 182 049	tracey@guringai.com.au, traceyhowie71@icloud.com
Indigenous Learning	Craig	Archibald	2 Victoria Street	BELLBIRD HEIGHTS	NSW	2325	0455 550 549	0467 229 507	indiglearning@gmail.com
Jumbunna Traffic Management Group Pty Ltd	Norm	Archibald	17 Flobern Ave	WAUCHOPE	NSW	2446		0413 718 149	jtmanagement@live.com.au
Kauma Pondee Inc.	Jill	Green	Unit 6/1 Central Street	LAMBTON	NSW	2305		0434 210 190	kaumapondee@live.com.au
Kawul Pty Ltd trading as Wonn1 Sites	Arthur	Fletcher	619 Main Road	GLENDALE	NSW	2285	02 4954 7751	0402 146 193	Wonn1sites@gmail.com
Lower Hunter Aboriginal Incorporated	David	Ahoy	5 Killara Drive	CARDIFF SOUTH	NSW	2285		0421 329 520	lowerhunterai@gmail.com
Lower Hunter Wonnarua Cultural Services	Lea-Anne Ball and Uncle Tommy Miller		51 Bowden Street	HEDDON GRETA	NSW	2321	02 4937 2694	0402 636 521	tn.miller@southernphone.com.au
Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson	& Darleen Johnson-Carroll	PO Box 246	SEVEN HILLS	NSW	2147		0497 983 332	murrabidgeemullangari@yahoo.com.au
Myland Cultural & Heritage Group	Warren	Schillings	30 Taurus Street	ELERMORE VALE	NSW	2287		0431 392 554	warren@yarnteen.com.au
Roger Matthews Consultancy	Roger	Matthews	105 View Street	GUNNEDAH	NSW	2380		0455 671 288	
Wattaka Wonnarua CC Service	Des	Hickey	4 Kennedy Street	SINGLETON	NSW	2330	02 6573 3786	0432 977 178	deshickey@bigpond.com

Organisation	First name	Surname	Address 1	City	State	Post code	Landline	Mobile	Email
Widescope Indigenous Group	Steven	Hickey	73 Russell Street	EMU PLAINS	NSW	2750		0425 230 693 0425 232 056	Widescope.group@live.com
Wonnarua Elders Council	Richard	Edwards	PO Box 844	CESSNOCK	NSW	2325			
Yarrawalk (A division of Tocomwall Pty Ltd), Tocomwall Pty Ltd on behalf of Scott Franks and Anor on behalf of the Plains Clans of the Wonnarua People NSD1680/2013	Scott	Franks	PO Box 76	CARRINGBAH	NSW	1495		0404 171 544	scott@tocomwall.com.au
Yinarr Cultural Services	Kathleen	Steward Kinchela	Lot 5 Westwood Estate	MERRIWA	NSW	2329		0475 436 589	yinarculturalservices@bigpond.com dontminemeay@gmail.com
	Kevin	Duncan	95 Moala Parade	CHARMHAVEN	NSW	2263	02 4392 9346	0431 224 099	kevin.duncan@bigpond.com
	Sharon	Hodgetts	47 Kent Street	GRETA	NSW	2334		0405 288 814	sharonhodgetts@hotmail.com
	Kyle	Howie	25 Athol Street	TOUKLEY	NSW	2263		0413 500 031	kyle@guringai.com.au
	Trudy	Smith	PO Box 141	TOUKLEY	NSW	2263		0409 449 609	hunters_1@bigpond.com
	Tamara	Towers	Unit 4, 16-18 Simpson Court	MAYFIELD	NSW	2304		0402 360 356	worimiacs@gmail.com
	Yvette and Jackson	Walker	19 Wakehurst Drive	WYONG	NSW	2259		0459 194 215 0476 218 076	yvettewalker1@hotmail.com

Jessica Blackman

From: Karyn Virgin
Sent: Wednesday, 31 July 2019 12:28 PM
To: Amanda Crick
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Karyn Virgin
Senior Heritage Consultant/Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284
Phone: (02) 4950 5322

www.umwelt.com.au

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From: Kathy Down <Kdown@umwelt.com.au>
Sent: Tuesday, 30 July 2019 9:09 AM
To: Karyn Virgin <kvirgin@umwelt.com.au>; Nicola Roche <nroche@umwelt.com.au>
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi
Another response for 4660 below.
Thanks!
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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From: Georgie Williams [mailto:gwilliams@lakemac.nsw.gov.au]
Sent: Tuesday, 30 July 2019 9:03 AM
To: Kathy Down
Subject: RE: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Good Morning Kathy,

Thank you for your letter, dated 26 July 2019, requesting Council to identify Aboriginal people or groups who may hold knowledge relevant to determining the significance of Aboriginal objects and/or places within the project area.

Council's Development Planner Heritage, Patricia Kinney, has advised Council does not have an official Registrar of the local Aboriginal stakeholders, so we are unable to provide a list of all interested parties.

Under our list for our DA consultation process, we would consult with the Biraban Local Aboriginal Land Council, Awabakal Traditional Owners Aboriginal Corporation, Awabakal Descendants Traditional Owners Aboriginal Corporation, and Lower Hunter Aboriginal Incorporated.

I hope this information is of assistance.

Regards

Georgie Williams
Senior Development Planner

LAKE MACQUARIE CITY

T 02 4921 0119 **M** 0439 685 573
E gwilliams@lakemac.nsw.gov.au
lakemac.com.au

From: Kathy Down <Kdown@umwelt.com.au>
Sent: Friday, 26 July 2019 2:06 PM
To: 'council@lakemac.nsw.gov.au' <council@lakemac.nsw.gov.au>
Cc: Nicola Roche <nroche@umwelt.com.au>; Karyn Virgin <kvirgin@umwelt.com.au>
Subject: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi
Please find attached a letter detailing notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
Please contact Karyn Virgin of our office if needed.
Regards
Kathy

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited

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Teralba, NSW 2284

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Jessica Blackman

From: Andrew Spencer <Andrew.Spencer@nntt.gov.au>
Sent: Wednesday, 31 July 2019 11:53 AM
To: Amanda Crick
Cc: Geospatial Search Requests
Subject: FW: SR6124 - 4660 Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW - SR6124
Attachments: Figure 1.jpg; 4660_Request for Search of Tribunal Registers.pdf; 20190730_SR6124_NSW_Lake_Macquarie_City_Council__LGA_Overlap_Report.xlsx

UNCLASSIFIED

Dear Amanda,

Thank you for getting back to us.

These searches of the Tribunal's registers are spatial searches generally based on an identifiable parcel of land. Where the area cannot be identified with certainty we may run the analysis against the local government area which will identify if there are native title considerations in the general area.

Are you able to provide parcel identifiers (lot/section/plan) or tenement identifiers for your area of interest?

Alternatively you can provide your own spatial data (shapefile) and we'll run the analysis against your shape.

Note that you can also look for native title interests in our online viewer Native Title Vision (http://www.nntt.gov.au/assistance/Geospatial/Pages/NTV.aspx)

Best regards

Andrew Spencer | TEAM LEADER (GEOSPATIAL SOLUTIONS)
National Native Title Tribunal | Perth
Level 5, Commonwealth Law Courts, 1 Victoria Avenue, Perth, Western Australia 6000
Telephone (08) 9425 1039 | Facsimile (08) 9425 1199 | Email andrew.spencer@nntt.gov.au
Freecall 1800 640 501 | www.nntt.gov.au

From: Amanda Crick <acrick@umwelt.com.au>
Sent: Wednesday, 31 July 2019 8:11 AM
To: Geospatial Search Requests <GeospatialSearch@NNTT.gov.au>
Cc: Karyn Virgin <kvirgin@umwelt.com.au>
Subject: RE: SR6124 - 4660 Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW - SR6124

Can I confirm there appears to be a suggestion of overlap with our project area, however when I have looked it up on the Native Title Register it is not within our area. I will re-attach our project area map, the area we are interested in is the project application area outlined in red.

Kind Regards
Amanda Crick
Archaeologist
(Monday-Wednesday)

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Mob: 0436 613 948

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From: Geospatial Search Requests [mailto:GeospatialSearch@NNTT.gov.au]
Sent: Tuesday, 30 July 2019 6:18 PM
To: Amanda Crick
Cc: Karyn Virgin
Subject: RE: SR6124 - 4660 Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW - SR6124

UNCLASSIFIED

Native title search – *NSW LGA – Lake Macquarie City Council*
Your ref: *4660 Newstan* - **Our ref:** *SR6124*

Dear Amanda Crick,

Thank you for your search request received on 29 July 2019 in relation to the above area, please find your results attached.

Search Results
The results provided are based on the information you supplied and are derived from a search of the following Tribunal databases:

- Schedule of Native Title Determination Applications
- Register of Native Title Claims
- Native Title Determinations
- Register of Indigenous Land Use Agreements
- Notified Indigenous Land Use Agreements

For more information about the Tribunal's registers or to search the registers yourself and obtain copies of relevant register extracts, please visit our website.

Please note: There may be a delay between a native title determination application being lodged in the Federal Court and its transfer to the Tribunal. As a result, some native title determination applications recently filed with the Federal Court may not appear on the Tribunal's databases.

The search results are based on analysis against external boundaries of applications only. Native title applications commonly contain exclusions clauses which remove areas from within the external boundary. To determine whether the areas described are in fact subject to claim, you need to refer to the "Area covered by claim" section of the relevant Register Extract or Schedule Extract and any maps attached.

Search results and the existence of native title
Please note that the enclosed information from the Register of Native Title Claims and/or the Schedule of Applications is **not** confirmation of the existence of native title in this area. This cannot be confirmed until the Federal Court makes a determination that native title does or does not exist in relation to the area. Such determinations are registered on the National Native Title Register.

The Tribunal accepts no liability for reliance placed on enclosed information
The enclosed information has been provided in good faith. Use of this information is at your sole risk. The National Native Title Tribunal makes no representation, either express or implied, as to the accuracy or suitability of the information enclosed for any particular purpose and accepts no liability for use of the information or reliance placed on it.

If you have any further queries, please do not hesitate to contact us on the free call number 1800 640 501.

Regards,

Geospatial Searches
National Native Title Tribunal | Perth
Email: GeospatialSearch@nntt.gov.au | **www.nntt.gov.au**

From: Amanda Crick <acrick@umwelt.com.au>
Sent: Monday, 29 July 2019 1:36 PM
To: Geospatial Search Requests <GeospatialSearch@NNTT.gov.au>
Cc: Karyn Virgin <kvirgin@umwelt.com.au>
Subject: SR6124 - 4660 Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Goodafternoon,
Requesting information on Native Title associated with our project area, as requested the search form has been filled out and attached.

Kind Regards

Amanda Crick
Archaeologist
(Monday-Wednesday)

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75 York Street
Teralba, NSW 2284

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Mob: 0436 613 948

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Jessica Blackman

From: Steven Cox <Steven.Cox@environment.nsw.gov.au>
Sent: Monday, 12 August 2019 3:59 PM
To: Amanda Crick; Karyn Virgin
Cc: Peter Nichols; Gillian Goode
Subject: RE: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW
Attachments: Letter - Newstan Mine Extension Project– Aboriginal Stakeholder List – Lake Macquarie City Council LGA - August 2019.pdf

Hi Amanda,

Please find attached a list of potential Aboriginal stakeholders for your project.

Apologies for the delay getting the list to you.

Regards
Steven

Steven Cox
Senior Team Leader Planning
Hunter Central Coast Branch

Biodiversity and Conservation Division | Department of Planning, Industry and Environment
T 02 4927 3140 | **M** 0472 800 088 | **E** steven.cox@environment.nsw.gov.au
Level 4, 26 Honeysuckle Drive, Newcastle NSW 2300
www.dpie.nsw.gov.au

The DPIE Hunter Central Coast Branch Planning Team has a group email address: rog.hcc@environment.nsw.gov.au. Please address all further email correspondence in relation to Planning and Aboriginal cultural heritage regulation matters to this address.

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: Amanda Crick <acrick@umwelt.com.au>
Sent: Monday, 12 August 2019 9:30 AM
To: OEH ROD Hunter Central Coast Mailbox <rog.hcc@environment.nsw.gov.au>; Steven Cox <Steven.Cox@environment.nsw.gov.au>
Subject: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Steven,

I believe this was sent out 14 days ago, however I have just noticed the email address used was the rog.hcc@environment.nsw.gov.au email. As we have not had a response I was concerned you have not received our request.

Please find attached a letter detailing notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
Please contact Karyn Virgin of our office if needed.
Kind Regards

Amanda Crick
Archaeologist
(Monday-Wednesday)

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Mob: 0436 613 948

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Jessica Blackman

From: Karyn Virgin
Sent: Wednesday, 7 August 2019 11:08 AM
To: Amanda Crick
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW
Attachments: Umwelt - Lake Macquarie - Biraban.pdf

Karyn Virgin
Senior Heritage Consultant/Archaeologist

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Teralba, NSW 2284
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From: Elizabeth LOANE <ELIZABETH.LOANE@aboriginalaffairs.nsw.gov.au>
Sent: Tuesday, 6 August 2019 4:17 PM
To: Karyn Virgin <kvirgin@umwelt.com.au>
Cc: Kathy Down <Kdown@umwelt.com.au>; Nicola Roche <nroche@umwelt.com.au>
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Dear Karyn,

We refer to the attached letter.

Kind regards,
Liz

Elizabeth Loane
Project Officer, Aboriginal Owners
Office of The Registrar ALRA 1983
Phone: 02 8633 1693
Email: elizabeth.loane@det.nsw.edu.au
PO Box 5068 Parramatta NSW 2124
Website: *www.oralra.nsw.gov.au*

From: Kathy Down <Kdown@umwelt.com.au>
Sent: Friday, 26 July 2019 2:08 PM
To: Admin officer, AANSW <~COR0826Adminofficer@aboriginalaffairs.nsw.gov.au>
Cc: Nicola Roche < Karyn Virgin <kvirgin@umwelt.com.au>
Subject: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi
Please find attached a letter detailing notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
Please contact Karyn Virgin of our office if needed.
Regards
Kathy

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
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Jessica Blackman

From: Karyn Virgin
Sent: Monday, 29 July 2019 11:53 AM
To: Amanda Crick
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW
Attachments: image006.jpg; 4660_Agency_20190726a_ltr_NSWLLS.pdf

Karyn Virgin
Senior Heritage Consultant/Archaeologist

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From: Kathy Down <Kdown@umwelt.com.au>
Sent: Monday, 29 July 2019 11:21 AM
To: Nicola Roche <nroche@umwelt.com.au>; Karyn Virgin <kvirgin@umwelt.com.au>
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Please see below for a response for 4660.
Regards
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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From: Jess Wegener [mailto:jess.wegener@lls.nsw.gov.au]
Sent: Monday, 29 July 2019 11:19 AM
To: Kathy Down; Ashley Williams
Cc: Admin Hunter
Subject: Fwd: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Kathy and Ashley,

Thank you for notifying HLLS,

Ashley let me know if you require anything from HLLS

Regards

Jess Wegener | SLSO Aboriginal Communities Officer
Natural Resources Management
Hunter Local Land Services | Healthy Landscapes
816 Tocal Road | PATERSON | NSW 2421
M: 0429 426 257 | T: (02) 4938 4946 |
E: jess.wegener@lls.nsw.gov.au
W: www.hunter.lls.nsw.gov.au : www.facebook.com/HunterLLS

I pay my respects to all First Nations people of the lands in which i work and acknowledge their long connections to the land we are on and extend that respect to all custodians today.

---------- Forwarded message ---------
From: **Admin Hunter** <admin.hunter@lls.nsw.gov.au>
Date: Fri, Jul 26, 2019 at 3:04 PM
Subject: Fwd: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW
To: Jess Wegener <jess.wegener@lls.nsw.gov.au>, Clare MacDougal <clare.macdougal@lls.nsw.gov.au>

Regards

Hunter Local Land Services
816 Tocal Rd | Private Bag 2010 | Paterson NSW 2421 |
t: 1300 795 299 | f: (02) 4930 1013
e: admin.hunter@lls.nsw.gov.au | **w:** www.lls.nsw.gov.au/hunter

www.hunter.lls.nsw.gov.au/our-region/contact-us

---------- Forwarded message ---------
From: **Kathy Down** <Kdown@umwelt.com.au>
Date: Fri, 26 Jul 2019 at 14:06
Subject: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW
To: admin.hunter@lls.nsw.gov.au <admin.hunter@lls.nsw.gov.au>
Cc: Nicola Roche <nroche@umwelt.com.au>, Karyn Virgin <kvirgin@umwelt.com.au>

Hi

Please find attached a letter detailing notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.

Please contact Karyn Virgin of our office if needed.

Regards

Kathy

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

www.umwelt.com.au

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Newcastle ph. 02 4950 5322 | **Perth** ph. 08 6260 0700 | **Canberra** ph. 02 6262 9484 | **Sydney** ph. 1300 793 267 | **Brisbane** ph. 1300 793 267

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Jessica Blackman

From: Amanda Crick
Sent: Monday, 12 August 2019 5:01 PM
To: Steven Cox
Subject: RE: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Steven
Thank you for your reply.

Kind Regards

Amanda Crick
Archaeologist
(Monday-Wednesday)

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0436 613 948

www.umwelt.com.au

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From: Steven Cox [mailto:Steven.Cox@environment.nsw.gov.au]
Sent: Monday, 12 August 2019 3:59 PM
To: Amanda Crick; Karyn Virgin
Cc: Peter Nichols; Gillian Goode
Subject: RE: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Amanda,

Please find attached a list of potential Aboriginal stakeholders for your project.

Apologies for the delay getting the list to you.

Regards
Steven

Steven Cox
Senior Team Leader Planning
Hunter Central Coast Branch

Biodiversity and Conservation Division | Department of Planning, Industry and Environment
T 02 4927 3140 | **M** 0472 800 088 | **E** steven.cox@environment.nsw.gov.au
Level 4, 26 Honeysuckle Drive, Newcastle NSW 2300
www.dpie.nsw.gov.au

The DPIE Hunter Central Coast Branch Planning Team has a group email address: rog.hcc@environment.nsw.gov.au. Please address all further email correspondence in relation to Planning and Aboriginal cultural heritage regulation matters to this address.

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: Amanda Crick <acrick@umwelt.com.au>
Sent: Monday, 12 August 2019 9:30 AM
To: OEH ROD Hunter Central Coast Mailbox <rog.hcc@environment.nsw.gov.au>; Steven Cox <Steven.Cox@environment.nsw.gov.au>
Subject: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Steven,

I believe this was sent out 14 days ago, however I have just noticed the email address used was the rog.hcc@environment.nsw.gov.au email. As we have not had a response I was concerned you have not received our request.

Please find attached a letter detailing notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
Please contact Karyn Virgin of our office if needed.
Kind Regards

Amanda Crick
Archaeologist
(Monday-Wednesday)

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0436 613 948

www.umwelt.com.au

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OFFICE OF THE REGISTRAR
ABORIGINAL LAND RIGHTS ACT 1983 (NSW)

6 August 2019

By email: KVirgin@umwelt.com.au

Karyn Virgin
Senior Archaeologist
Umwelt
75 York Street
TERALBA NSW 2284

Dear Karyn,

Request - Search for Registered Aboriginal Owners

We refer to your letter dated 26 July 2019 ("Letter") regarding an Aboriginal Cultural Heritage Assessment for the proposed development at Lake Macquarie, NSW as identified on the map attached to the Letter.

Under Section 170 of the *Aboriginal Land Rights Act 1983* the Office of the Registrar is required to maintain the Register of Aboriginal Owners (RAO). A search of the RAO has shown that there are not currently any Registered Aboriginal Owners in the project area.

We suggest you contact Biraban Local Aboriginal Land Council on 02 4959 1829 as they may be able to assist you in identifying Aboriginal stakeholders who wish to participate.

Yours sincerely

Eloane

Elizabeth Loane
Project Officer, Aboriginal Owners
Office of the Registrar, ALRA

Address: Level 3, 2 – 10 Wentworth Street, PARRAMATTA NSW 2150
Post: P.O Box 5068, PARRAMATTA NSW 2124
Phone: 02 8633 1266

Jessica Blackman

From: Karyn Virgin
Sent: Wednesday, 14 August 2019 2:46 PM
To: Amanda Crick
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Karyn Virgin
Senior Heritage Consultant/Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284
Phone: (02) 4950 5322

www.umwelt.com.au

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Newcastle ph. 02 4950 5322 | **Perth** ph. 08 6260 0700 | **Canberra** ph. 02 6262 9484 | **Sydney** ph. 1300 793 267 | **Brisbane** ph. 1300 793 267

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From: Tracey Howie <traceyhowie71@icloud.com>
Sent: Wednesday, 14 August 2019 1:06 PM
To: Kathy Down <Kdown@umwelt.com.au>
Cc: Nicola Roche <nroche@umwelt.com.au>; Karyn Virgin <kvirgin@umwelt.com.au>
Subject: Re: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Karyn
Please register Wannangini PtyLtd (also formerly GTLAC) for the proposed Newstan Mine Extension Project. We require consultation & active participation in this Project in all aspects relating to our cultural heritage.
Kind regards
Tracey Howie
Senior Cultural Heritage Officer
Wannangini PtyLtd
M: 0404 182049
E: Tracey.howie@wannangini.org

Sent from my Tracey's iPhone

On 14 Aug 2019, at 11:59 am, Kathy Down <Kdown@umwelt.com.au> wrote:

> Hi
> Please find attached a letter regarding notification for Aboriginal community consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.

In accordance with Section 4.1.3 of the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010), Umwelt are seeking to ascertain if your organisation has cultural information relevant to determining the significance of Aboriginal objects and/or places within the project area. To facilitate the consultation process, please register an interest in the project by no later **28 August 2019**.

Please forward all registrations to:

Karyn Virgin
Umwelt Environmental and Social Consultants
75 York Street
Teralba NSW 2284
E: kvirgin@umwelt.com.au

Regards
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

www.umwelt.com.au

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<4660_RAP Notification_20190814a_ltr_GTLAC_Howie_2.pdf>

Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by the Centennial Coal Company Ltd to prepare an Aboriginal Cultural Heritage Assessment (ACHA). The ACHA relates to the proposed extension of the existing Newstan Mine via the continuation of underground mining within the West Borehole seam.

Should it be necessary, it is intended that the ACHA will support any potential application for an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the *National Parks and Wildlife Act 1974*. This consultation will inform the Aboriginal cultural heritage assessment and will assist the Director General of the OEH in his or her consideration and determination of the AHIP application.

Umwelt are seeking to identify Aboriginal people or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places within the project area. If your organisation is aware of any such Aboriginal people or groups who you think may want to be involved in the project, please forward the relevant contact details to:

Karyn Virgin
75 York Street
Teralba NSW 2284

Email: kvirgin@umwelt.com.au

The name and contact details of the proponent:

Iain Hornshaw
Approvals Coordinator
Centennial Coal Company Limited | Fassifern
PO Box 1000
TORONTO NSW 2283
E: Iain.Hornshaw@centennialcoal.com.au

Registration closes on Monday 12 August 2019.

Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by the Centennial Coal Company Ltd to prepare an Aboriginal Cultural Heritage Assessment (ACHA). The ACHA relates to the proposed extension of the existing Newstan Mine via the continuation of underground mining within the West Borehole seam.

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Umwelt are seeking to identify Aboriginal people or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places within the project area. If your organisation is aware of any such Aboriginal people or groups who you think may want to be involved in the project, please forward the relevant contact details to:

Karyn Virgin
75 York Street
Teralba NSW 2284
Email: kvirgin@umwelt.com.au

The name and contact details of the proponent:
Iain Hornshaw
Approvals Coordinator
Centennial Coal Company Limited | Fassifern
PO Box 1000, TORONTO NSW 2283
E: Iain.Hornshaw@centennialcoal.com.au

Registration closes on Monday 12 August 2019.

umwelt
Environmental & Social Consultants

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Quality Outcomes

Aboriginal Cultural Heritage Assessment
Newstan Mine Expansion Project

The below listed Aboriginal stakeholders were contacted regarding the Centennial Coal's Newstan Mine Expansion Project in accordance with the relevant aspects of Part 5, Division 2, Clause 60 of the NPW Regulation and the *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010).

A copy of the notification letter is provided with this list.

Biraban Local Aboriginal Land Council
Awabakal Traditional Owners Aboriginal Corporation
Awabakal Descendants Traditional Owners Aboriginal Corporation
Lower Hunter Aboriginal Incorporated.
A1 Indigenous Services
Aliera French Trading
Resource Association, Miromaa Aboriginal Language and Technology Centre
Awabakal & Guringai Pty Ltd
Awabakal Descendants Traditional Owners Aboriginal Corporation
Awabakal Traditional Owners Aboriginal Corporation
B-H Heritage Consultants
Corroboree Aboriginal Corporation
Crimson-Rosie
Daniella Chedzey, Jessica Wegener
Deslee Talbott Consultants
Didge Ngunawal Clan
Divine Diggers Aboriginal Cultural Consultants
Gidawaa Walang & Barkuma Neighbourhood Centre Inc.
Wannangini Pty Ltd (previously Guringai Tribal Link Aboriginal Corporation)
Indigenous Learning
Jumbunna Traffic Management Group Pty Ltd
Kauma Pondee Inc.
Kauwul Pty Ltd trading as Wonn1 Sites
Lower Hunter Aboriginal Incorporated
Lower Hunter Wonnarua Cultural Services
Murra Bidgee Mullangari Aboriginal Corporation
Myland Cultural & Heritage Group
Roger Matthews

Newcastle
75 York Street
Teralba NSW 2284

Perth
Level 1
12 Prowse Street
West Perth WA 6005
PO Box 783
West Perth WA 6872

Canberra
2/99 Northbourne Avenue
Turner ACT 2612
PO Box 6135
O'Connor ACT 2602

Sydney
Level 3
50 York Street
Sydney, NSW, 2000

Brisbane
Level 13
500 Queen Street
Brisbane QLD 4000

Orange
Office 1
3 Hampden Avenue
Orange NSW 2800

T| 1300 793 267
E| info@umwelt.com.au
www.umwelt.com.au

Umwelt (Australia) Pty Limited
ABN 18 059 519 041

Consultancy
Wattaka Wonnarua CC Service
Widescope Indigenous Group
Wonnarua Elders Council
Yarrawalk (A division of Tocomwall Pty Ltd), Tocomwall Pty Ltd on behalf of Scott Franks and Anor on behalf of the Plains Clans of the Wonnarua People NSD1680/2013
Yinarr Cultural Services
Kevin Duncan
Sharon Hodgetts
Kyle Howie
Trudy Smith
Tamara Towers
Yvette and Jackson Walker

Our Ref: 4660/NR/KV/14082019

«Organisation_1»
«Organisation_2»
«Contact_Name»
«Address_1»
«Address_2»

Email: «Contact_Email»

Dear «Contact_Name»

Re: Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by the Centennial Coal Company Ltd (Centennial) to prepare an Aboriginal Cultural Heritage Assessment (ACHA) that addresses the requirements of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a), *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010c) and *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011).

The ACHA relates to the proposed extension of the existing Newstan Mine via the continuation of underground mining within the West Borehole seam. The area of proposed works is shown in **Figure 1**.

Should it be necessary, it is intended that the ACHA will support any potential application for an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the *National Parks and Wildlife Act 1974*. In preparing the Aboriginal cultural heritage assessment, Umwelt (on behalf of Centennial) will be undertaking Aboriginal community consultation in accordance with the Office of Environment and Heritage's (OEH) *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010). This consultation will inform the Aboriginal cultural heritage assessment and will assist the Director General of the OEH in his or her consideration and determination of any AHIP application.

In accordance with Section 4.1.3 of the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010), Umwelt are seeking to ascertain if your organisation has cultural information relevant to determining the significance of Aboriginal objects and/or places within the project area. To facilitate the consultation process, please register an interest in the project by no later **28 August 2019**.

Please forward all registrations to:

Karyn Virgin
Umwelt Environmental and Social Consultants
75 York Street
Teralba NSW 2284
E: kvirgin@umwelt.com.au

In compliance with the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) the contact details for the relevant Project Manager are as follows:

Iain Hornshaw
Approvals Coordinator
Centennial Coal Company Limited | Fassifern
PO Box 1000
TORONTO NSW 2283
E: Iain.Hornshaw@centennialcoal.com.au

If you have any questions regarding this correspondence or wish to discuss the proposed project further, please do not hesitate to contact myself via email or on 02 4950 5322.

Yours sincerely

Karyn Virgin
Senior Archaeologist

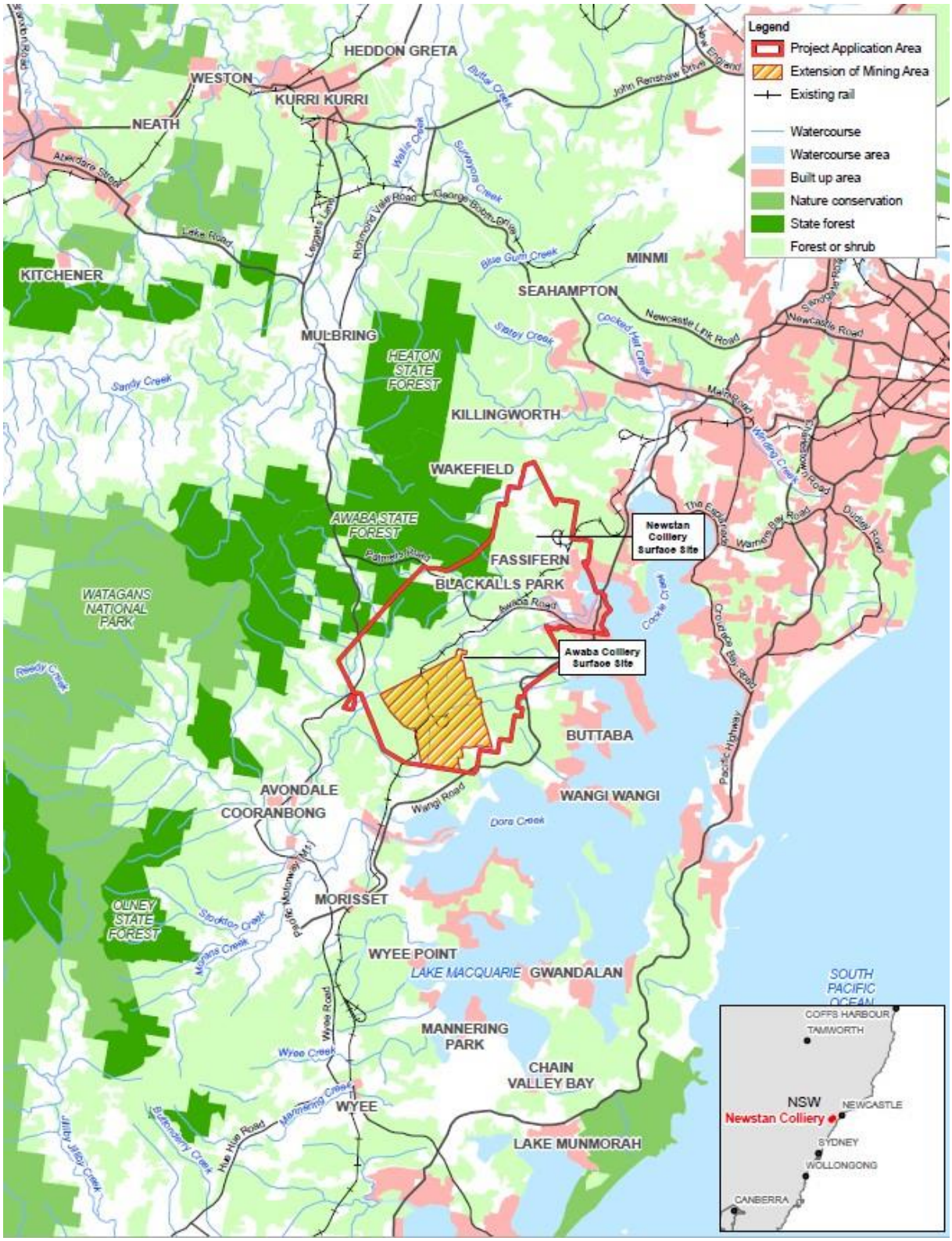


Figure 1 Area of proposed works

Source: GHD 2019

Jessica Blackman

From: Karyn Virgin
Sent: Wednesday, 14 August 2019 7:28 PM
To: Amanda Crick
Subject: Fwd: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Sent from my iPhone

Begin forwarded message:

From: "PeterLeven" <peterleven@y7mail.com>
Date: 14 August 2019 at 6:30:54 pm AEST
To: "Karyn Virgin" <kvirgin@umwelt.com.au>
Subject: RE: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Karyn
ADTOAC wish to register our interest for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
We would like to be involved in any consultation process for this project because of our People's connection to this area for thousands of years and as a consequence the ***Cultural Knowledge*** held by us regarding our Traditional Country.
Cheers,
Peter Leven
Managing Director
Awabakal Descendants Traditional Owners Aboriginal Corporation
Email: peterleven@y7mail.com Phone: 0243903740 Mobile: 0405149684
PO Box 137 Budgewoi NSW 2262



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From: Kathy Down [mailto:Kdown@umwelt.com.au]
Sent: Wednesday, 14 August 2019 11:47 AM
To: awabakal.to@gmail.com
Cc: Karyn Virgin; Nicola Roche
Subject: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW
Hi
Please find attached a letter regarding notification for Aboriginal community consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
In accordance with Section 4.1.3 of the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010), Umwelt are seeking to ascertain if your organisation has cultural information relevant to determining the significance of Aboriginal objects and/or places within the project area.

To facilitate the consultation process, please register an interest in the project by no later **28 August 2019**.

Please forward all registrations to:

Karyn Virgin
Umwelt Environmental and Social Consultants
75 York Street
Teralba NSW 2284
E: kvirgin@umwelt.com.au

Regards
Kath
Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

www.umwelt.com.au

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Newcastle ph. 02 4950 5322 | **Perth** ph. 08 6260 0700 | **Canberra** ph. 02 6262 9484 | **Sydney** ph. 1300 793 267 | **Brisbane** ph. 1300 793 267

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Jessica Blackman

From: Karyn Virgin
Sent: Monday, 19 August 2019 9:35 AM
To: Amanda Crick
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Karyn Virgin
Senior Heritage Consultant/Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284
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From: Kathy Down <Kdown@umwelt.com.au>
Sent: Friday, 16 August 2019 1:28 PM
To: Karyn Virgin <kvirgin@umwelt.com.au>; Nicola Roche <nroche@umwelt.com.au>
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Response for 4660 below.
Regards
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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Please consider the environment before printing this email

From: Kerrie Brauer [mailto:kerrie@awabakal.com.au]
Sent: Friday, 16 August 2019 1:27 PM
To: Kathy Down
Cc: Nicola Roche; Karyn Virgin; 'Tracey Howie'; 'Peter Leven'
Subject: RE: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Karyn,

Thank you for your email.

Please register ATOAC for the proposed Newstan Mine Extension Project.

I'm not sure that you may not be aware that Tracey, Peter and myself are members of the Centennial Coal Aboriginal Advisory Committee regarding their Aboriginal Cultural Heritage Management Plan which involve the Newstan, Awaba, Myuna and Mandalong Mines.

If you require any further information please do not hesitate in contacting me.

Kind regards,
Kerrie Brauer

ATOAC
Kerrie Brauer | Director | Administration | Awabakal Traditional Owners Aboriginal Corporation
M: 04 12 86 63 57 | E: kerrie@awabakal.com.au | www.awabakal.com.au
PO Box 122 Rutherford NSW 2320 Australia

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From: Kathy Down [mailto:Kdown@umwelt.com.au]
Sent: Wednesday, 14 August 2019 11:48 AM
To: 'kerrie@awabakal.com.au'
Cc: Nicola Roche; Karyn Virgin
Subject: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi
Please find attached a letter regarding notification for Aboriginal community consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
In accordance with Section 4.1.3 of the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010), Umwelt are seeking to ascertain if your organisation has cultural information relevant to determining the significance of Aboriginal objects and/or places within the project area. To facilitate the consultation process, please register an interest in the project by no later **28 August 2019**.

Please forward all registrations to:

Karyn Virgin

Umwelt Environmental and Social Consultants
75 York Street
Teralba NSW 2284
E: kvirgin@umwelt.com.au

Regards
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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Please consider the environment before printing this email

Jessica Blackman

From: Karyn Virgin
Sent: Wednesday, 14 August 2019 3:15 PM
To: Amanda Crick
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Karyn Virgin
Senior Heritage Consultant/Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284
Phone: (02) 4950 5322

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Please consider the environment before printing this email

From: Kathy Down <Kdown@umwelt.com.au>
Sent: Wednesday, 14 August 2019 3:00 PM
To: Nicola Roche <nroche@umwelt.com.au>; Karyn Virgin <kvirgin@umwelt.com.au>
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Response for 4660 below.
Regards
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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Please consider the environment before printing this email

From: lilly carroll [mailto:didgengunawalclan@yahoo.com.au]
Sent: Wednesday, 14 August 2019 2:50 PM
To: Kathy Down
Subject: Re: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Karin,

DNC would like to register an interest into Newstan Mine extension project at Lake Macquarie

Kind regards
Paul Boyd & Lilly Carroll
Directors DNC

Sent from Yahoo Mail for iPhone

On Wednesday, August 14, 2019, 11:56 am, Kathy Down <Kdown@umwelt.com.au> wrote:

> Hi
>
> Please find attached a letter regarding notification for Aboriginal community consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
>
> In accordance with Section 4.1.3 of the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010), Umwelt are seeking to ascertain if your organisation has cultural information relevant to determining the significance of Aboriginal objects and/or places within the project area. To facilitate the consultation process, please register an interest in the project by no later **28 August 2019**.
>
> **Please forward all registrations to:**
>
> **Karyn Virgin**
>
> **Umwelt Environmental and Social Consultants**
> **75 York Street**
> **Teralba NSW 2284**
>
> **E: kvirgin@umwelt.com.au**
>
> Regards
>
> Kath

Kathy Down
Senior Project Administrator

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Teralba, NSW 2284

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Please consider the environment before printing this email

Jessica Blackman

From: Karyn Virgin
Sent: Tuesday, 20 August 2019 9:24 AM
To: Amanda Crick
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Karyn Virgin
Senior Heritage Consultant/Archaeologist

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Please consider the environment before printing this email

From: Tracey Howie <tracey@guringai.com.au>
Sent: Monday, 19 August 2019 11:41 PM
To: Karyn Virgin <kvirgin@umwelt.com.au>; Kathy Down <Kdown@umwelt.com.au>; Kerrie Brauer <kerrie@awabakal.com.au>
Cc: Nicola Roche <nroche@umwelt.com.au>
Subject: Re: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Karyn,

My apologies but due to unforeseen reasons, GTLAC will not be merging with Wannangini Pty.Ltd. as per previous email indicated.

We are however merging with Awabakal & Guringai Pty.Ltd. so **please amend Guringai Tribal Link Aboriginal Corporation contact details and new Company Name** to the following;

Awabakal & Guringai Pty.Ltd
Kerrie Brauer
M: 0412 866 357
E: kerrie@awabakal.com.au

Please register Awabakal & Guringai Pty.Ltd. for the proposed Newstan Mine Extension Project.

Wannangini Pty.Ltd are still an interested Aboriginal Stakeholder Group for this region and this Project.

Kind regards
Tracey Howie
Director
Awabakal & Guringai Pty.Ltd.
M: 0404 182049
E: tracey@guringai.com.au

On 14 Aug 2019, at 1:05 pm, Tracey Howie <traceyhowie71@icloud.com> wrote:

Hi Karyn
Please register Wannangini PtyLtd (also formerly GTLAC) for the proposed Newstan Mine Extension Project. We require consultation & active participation in this Project in all aspects relating to our cultural heritage.
Kind regards
Tracey Howie
Senior Cultural Heritage Officer
Wannangini PtyLtd
M: 0404 182049
E: Tracey.howie@wannangini.org

Sent from my Tracey's iPhone

On 14 Aug 2019, at 11:59 am, Kathy Down <Kdown@umwelt.com.au> wrote:

Hi
Please find attached a letter regarding notification for Aboriginal community consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
In accordance with Section 4.1.3 of the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010), Umwelt are seeking to ascertain if your organisation has cultural information relevant to determining the significance of Aboriginal objects and/or places within the project area. To facilitate the consultation process, please register an interest in the project by no later **28 August 2019**.

Please forward all registrations to:

Karyn Virgin
Umwelt Environmental and Social Consultants
75 York Street
Teralba NSW 2284
E: kvirgin@umwelt.com.au

Regards
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
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<4660_RAP Notification_20190814a_ltr_GTLAC_Howie_2.pdf>

Jessica Blackman

From: Karyn Virgin
Sent: Wednesday, 14 August 2019 2:46 PM
To: Amanda Crick
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Karyn Virgin
Senior Heritage Consultant/Archaeologist

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Please consider the environment before printing this email

From: Tracey Howie <traceyhowie71@icloud.com>
Sent: Wednesday, 14 August 2019 1:06 PM
To: Kathy Down <Kdown@umwelt.com.au>
Cc: Nicola Roche <nroche@umwelt.com.au>; Karyn Virgin <kvirgin@umwelt.com.au>
Subject: Re: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Karyn
Please register Wannangini PtyLtd (also formerly GTLAC) for the proposed Newstan Mine Extension Project. We require consultation & active participation in this Project in all aspects relating to our cultural heritage.
Kind regards
Tracey Howie
Senior Cultural Heritage Officer
Wannangini PtyLtd
M: 0404 182049
E: Tracey.howie@wannangini.org

Sent from my Tracey's iPhone

On 14 Aug 2019, at 11:59 am, Kathy Down <Kdown@umwelt.com.au> wrote:

> Hi
> Please find attached a letter regarding notification for Aboriginal community consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.

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Please forward all registrations to:

Karyn Virgin
Umwelt Environmental and Social Consultants
75 York Street
Teralba NSW 2284
E: kvirgin@umwelt.com.au

Regards
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
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<4660_RAP Notification_20190814a_ltr_GTLAC_Howie_2.pdf>

Jessica Blackman

From: Jessica Blackman
Sent: Friday, 11 October 2019 1:53 PM
To: WIDESCOPE .
Subject: RE: 4660 - Proposed Newstan Mine Extension Project, NSW

Good afternoon Steven,

My apologies for the delay in responding to you regarding your below query for the Newstan Mine Extension Project.

I am just checking your query and will get to you as soon as possible- I believe you will be fine with your current level of cover but am double checking to be sure.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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From: WIDESCOPE . <widescope.group@live.com>
Sent: Thursday, 3 October 2019 12:17 PM
To: Kathy Down <Kdown@umwelt.com.au>
Subject: RE: 4660 - Proposed Newstan Mine Extension Project, NSW

Hi Kathy,

I have a query regarding the site officer application, Requirement of 20 million public liability cover.

I currently hold cover for 10 million as most mine sites request a 5 to 10 million coverage from the Aboriginal site officers. Please let me know if the 10 million coverage is ok or If I will need to increase my policy.

Regards
Steven Hickey

From: Kathy Down <Kdown@umwelt.com.au>
Sent: Tuesday, October 1, 2019 2:56:09 PM
To: 'widescope.group@live.com' <widescope.group@live.com>
Cc: Jessica Blackman <jblackman@umwelt.com.au>; Nicola Roche <nroche@umwelt.com.au>
Subject: 4660 - Proposed Newstan Mine Extension Project, NSW

Hi

The attached letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322
Email: kvirgin@umwelt.com.au

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Regards

Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Wednesday, 16 October 2019 9:20 AM
To: WIDESCOPE .
Subject: RE: 4660 - Proposed Newstan Mine Extension Project, NSW, Site officer Application

Good morning Steven,

I haven't had confirmation on your query below, however, I believe you should be fine with your current level of insurance, as the methodology notes that RAPs only need $20,000, not 20million.

If I get information otherwise, I will let you know, but I think you can proceed with your current cover for now.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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From: WIDESCOPE . <widescope.group@live.com>
Sent: Friday, 11 October 2019 1:32 PM
To: Karyn Virgin <kvirgin@umwelt.com.au>
Subject: FW: 4660 - Proposed Newstan Mine Extension Project, NSW, Site officer Application

Hi Karyn

I have had no response to an email sent on Thursday, 3 October 2019 Regarding the site officer application, Please see email below
If you could please clarify the query it would be appreciated

Regards
Steven Hickey

From: WIDESCOPE .
Sent: Thursday, October 3, 2019 12:17:21 PM
To: Kathy Down <Kdown@umwelt.com.au>
Subject: RE: 4660 - Proposed Newstan Mine Extension Project, NSW

Hi Kathy,

I have a query regarding the site officer application, Requirement of 20 million public liability cover.

I currently hold cover for 10 million as most mine sites request a 5 to 10 million coverage from the Aboriginal site officers. Please let me know if the 10 million coverage is ok or If I will need to increase my policy.

Regards
Steven Hickey

From: Kathy Down <Kdown@umwelt.com.au>
Sent: Tuesday, October 1, 2019 2:56:09 PM
To: 'widescope.group@live.com' <widescope.group@live.com>
Cc: Jessica Blackman <jblackman@umwelt.com.au>; Nicola Roche <nroche@umwelt.com.au>
Subject: 4660 - Proposed Newstan Mine Extension Project, NSW

Hi

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Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322
Email: kvirgin@umwelt.com.au

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Regards

Kath

Kathy Down
Senior Project Administrator

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Jessica Blackman

From: Karyn Virgin
Sent: Monday, 19 August 2019 12:40 PM
To: Amanda Crick
Subject: Fwd: Newstan Mine Extension project ACHA EOI
Attachments: Umwelt ACHA EOI Newstan Mine Extension 190819.pdf; ATT00001.htm

Sent from my iPhone

Begin forwarded message:

> **From:** "suzie worth" <suzieworth17@gmail.com>
> **Date:** 19 August 2019 at 12:14:35 pm AEST
> **To:** <kvirgin@umwelt.com.au>
> **Cc:** <Iain.Hornshaw@centennialcoal.com.au>, "'Arthur Fletcher'" <wonn1sites@gmail.com>
> **Subject: Newstan Mine Extension project ACHA EOI**
>
> Hi Karyn
> Attached is a letter for your attention from Arthur Fletcher, Wonn1 Contracting.
> Kind regards,
> Suzie Worth
> For Arthur Fletcher
> Kauwul Wonn1

Wonn1
Entity of Kauwul Pty Ltd

619 Main Road Glendale, 2285

PHONE: 0249547751 Mobile: 0402146193

ABN: 27 153 953 363

19 August 2019

Ms K Virgin
Umwelt (Australia) Pty Ltd
75 York Street
TERALBA NSW 2284
Email: kvirgin@umwelt.com.au

Dear Karyn

RE: EXPRESSION OF INTEREST: ABORIGINAL CULTURAL HERITAGE ASSESMENT FOR THE PROPOSED NEWSTAN MINE EXTENSION PROJECT, LAKE MACQUARIE NSW

Thank you for your letter dated 14 August 2019 inviting us to submit an expression of interest in the above project.

We wish to advise that Arthur Fletcher of Kauwul Pty Ltd trading as Wonn1 Contracting would like to be consulted and to participate in any future fieldwork proposed for the above project. We would appreciate receiving any correspondence on this project.

Registered Aboriginal Party: Kauwul Wonn1 Contracting

Brief Description of Skills and Experience:
Arthur Fletcher has had many years experience in cultural heritage/archaeological survey, salvage and excavation work within the Hunter Valley on projects including mining, infrastructure and development sites. He has worked with EnergyAustralia, Hunter Water, RTA/RMS including Hunter Expressway and Pacific Highway Raymond Terrace Bypass projects, ARTC and on many mine sites. Arthur has had sites training through NSW NPWS and continues to expand cultural heritage knowledge independently through his association with skilled knowledge-holder Elders within the Hunter Valley and further afield. He has undertaken many inductions for RMS, ARTC and carries SGS Induction cards for mine sites including Glencore/Xstrata and Rio Tinto Coal & Allied sites (Induction cards are available upon request).
(White Card: Arthur Fletcher Work Cover CG100787865SEQ1 11/03/2006)

Statement of Physical Fitness to Undertake the Necessary Sites Work:
Arthur is be able to complete the specific project tasks required within acceptable survey terrain limits and climate. He also utilises the services of experienced sites officers who are knowledgeable of the appropriate locations of cultural interest and are physically fit for survey and manual excavation tasks.

Statement of Cultural Knowledge and/or Connection with Country:
Arthur is a Wonnarua/Gringai elder with knowledge of cultural lore and a concentrated interest, knowledge and understanding of cultural heritage sites within the Lake Macquarie/Newcastle region, and spiritual

beliefs of his traditional Country. The known cultural knowledge will be shared with your organisation during the active involvement in this project.

Organisations Commercial Rates and Terms of Engagement:
Total rates per day (including travel) = $600.00/day
Terms of payment is 14 day following your receipt of our invoice.

Certificates of Currency:
Both the Certificates of Currency for Workers Compensation and Public Liability Insurance are attached to this letter as requested.

Thank you once again for this opportunity to lodge an expression of interest for this project. We look forward to hearing from you soon.

Kind regards



Suzie Worth
For Arthur C Fletcher
Wonn1 (Kauwul Pty Ltd)

(Attached)

Jessica Blackman

From: Amanda Crick
Sent: Monday, 19 August 2019 9:59 AM
To: 'PeterLeven'
Subject: FW: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hey Peter,
Both Tracey and Kerrie have registered interest would you like to register interest as well? Especially in light of the fact you are members of the Centennial Coal Aboriginal Advisory Committee regarding their Aboriginal Cultural Heritage Management Plan, which includes Newstan. Tomorrow is my last day so if you email after tomorrow please email Karyn.

Kind Regards

Amanda Crick
Archaeologist
(Monday-Wednesday)

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0436 613 948

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From: Karyn Virgin
Sent: Friday, 16 August 2019 1:55 PM
To: Amanda Crick
Subject: Fwd: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Sent from my iPhone

Begin forwarded message:

> **From:** "Kerrie Brauer" <kerrie@awabakal.com.au>
> **Date:** 16 August 2019 at 1:26:44 pm AEST
> **To:** "'Kathy Down'" <Kdown@umwelt.com.au>
> **Cc:** "'Nicola Roche'" <nroche@umwelt.com.au>, "'Karyn Virgin'" <kvirgin@umwelt.com.au>, "'Tracey Howie'" <tracey@guringai.com.au>, "'Peter Leven'" <peterleven@y7mail.com>

Subject: RE: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi Karyn,

Thank you for your email.

Please register ATOAC for the proposed Newstan Mine Extension Project.

I'm not sure that you may not be aware that Tracey, Peter and myself are members of the Centennial Coal Aboriginal Advisory Committee regarding their Aboriginal Cultural Heritage Management Plan which involve the Newstan, Awaba, Myuna and Mandalong Mines.

If you require any further information please do not hesitate in contacting me.

Kind regards,
Kerrie Brauer

ATOAC
Kerrie Brauer | Director | Administration | Awabakal Traditional Owners Aboriginal Corporation
M: 04 12 86 63 57 | E: kerrie@awabakal.com.au | www.awabakal.com.au
PO Box 122 Rutherford NSW 2320 Australia

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From: Kathy Down [mailto:Kdown@umwelt.com.au]
Sent: Wednesday, 14 August 2019 11:48 AM
To: 'kerrie@awabakal.com.au'
Cc: Nicola Roche; Karyn Virgin
Subject: 4660 - Notification for Aboriginal Community Consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW

Hi
Please find attached a letter regarding notification for Aboriginal community consultation for the proposed Newstan Mine Extension Project, Lake Macquarie NSW.
In accordance with Section 4.1.3 of the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010), Umwelt are seeking to ascertain if your organisation has cultural information relevant to determining the significance of Aboriginal objects and/or places within the project area.
To facilitate the consultation process, please register an interest in the project by no later **28 August 2019**.

Please forward all registrations to:

Karyn Virgin
Umwelt Environmental and Social Consultants
75 York Street
Teralba NSW 2284
E: kvirgin@umwelt.com.au

Regards
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
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Phone: (02) 4950 5322

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Newcastle ph. 02 4950 5322 | **Perth** ph. 08 6260 0700 | **Canberra** ph. 02 6262 9484 | **Sydney** ph. 1300 793 267 | **Brisbane** ph. 1300 793 267

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Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Biraban Local Aboriginal Land Council
Ashley Williams
9 Thorne Street
TORONTO NSW 2283

ceo@birabanlalc.com.au

Dear Ashley Williams

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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Teralba NSW 2284

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Umwelt (Australia) Pty Limited
ABN: 18 059 519 041

1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

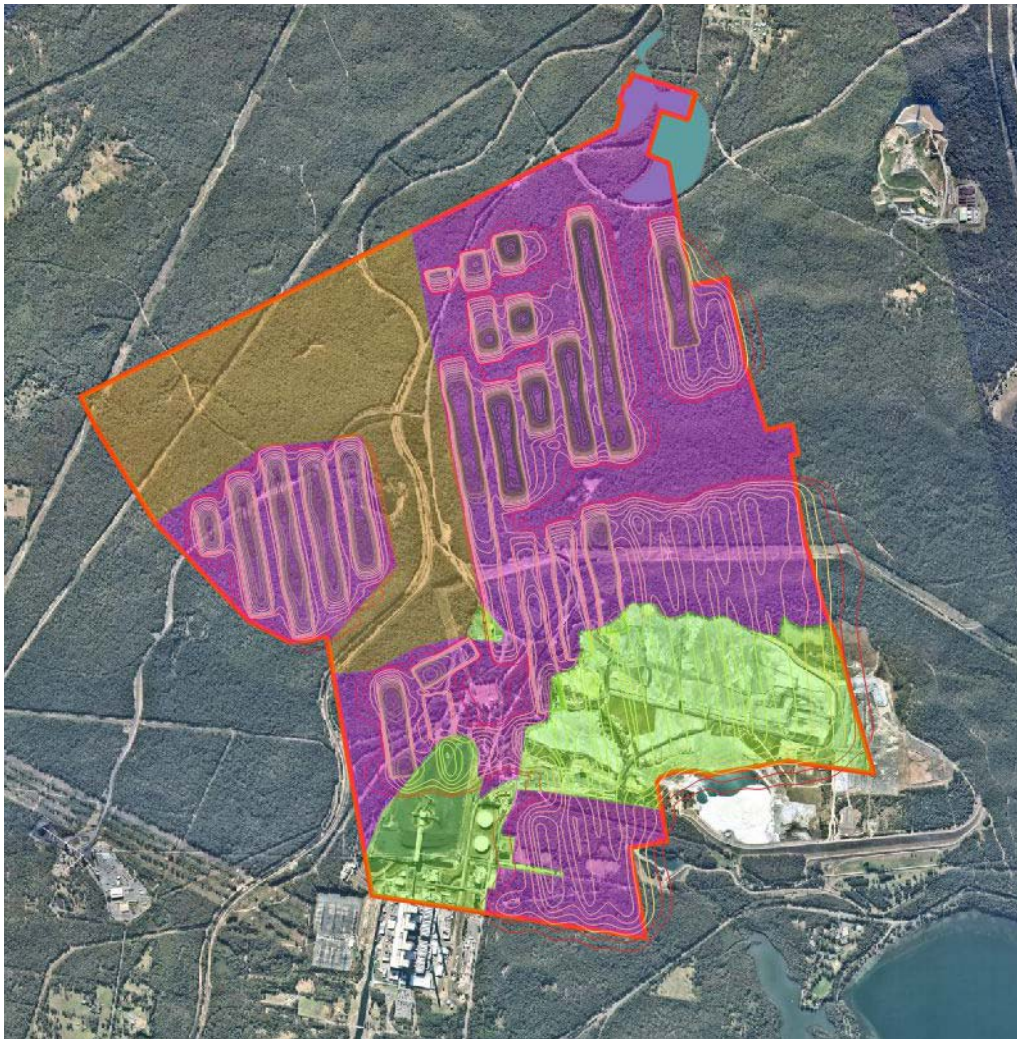


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

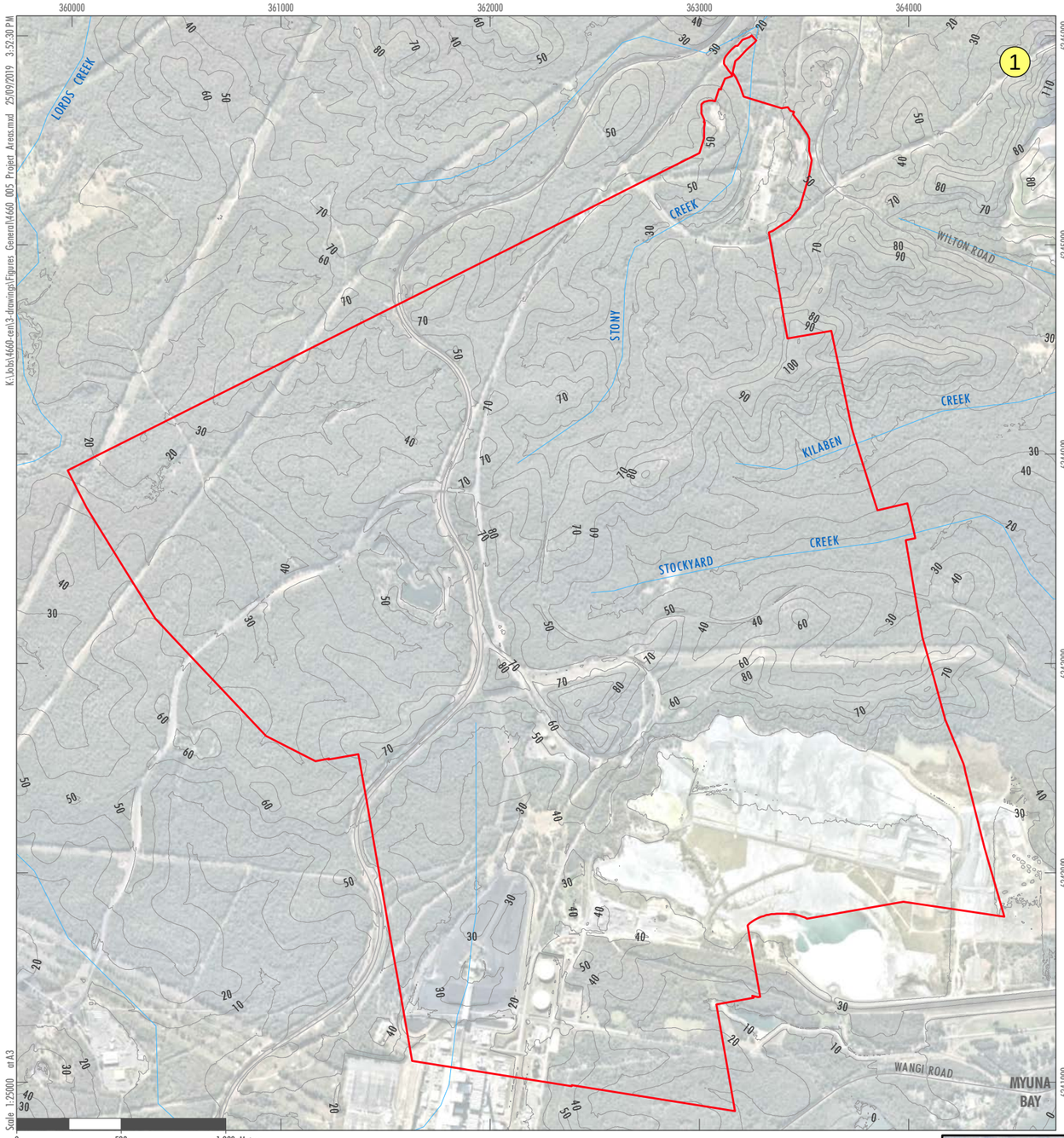
Name of Authorised Person: _____

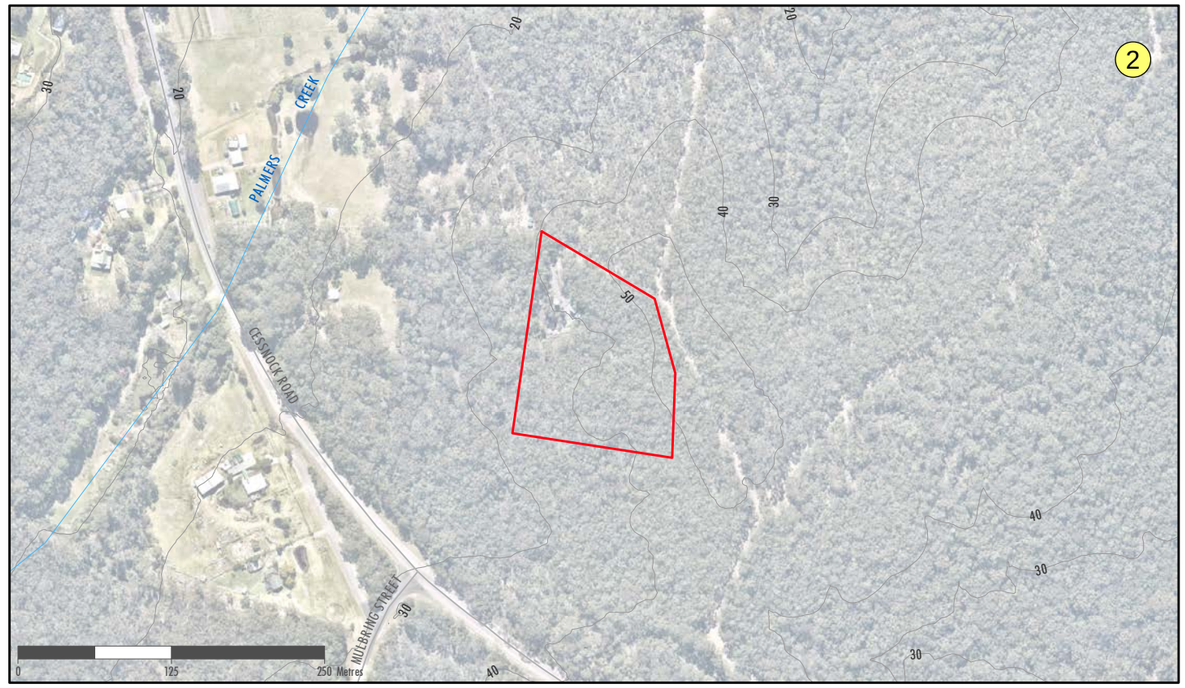
Signature: _____

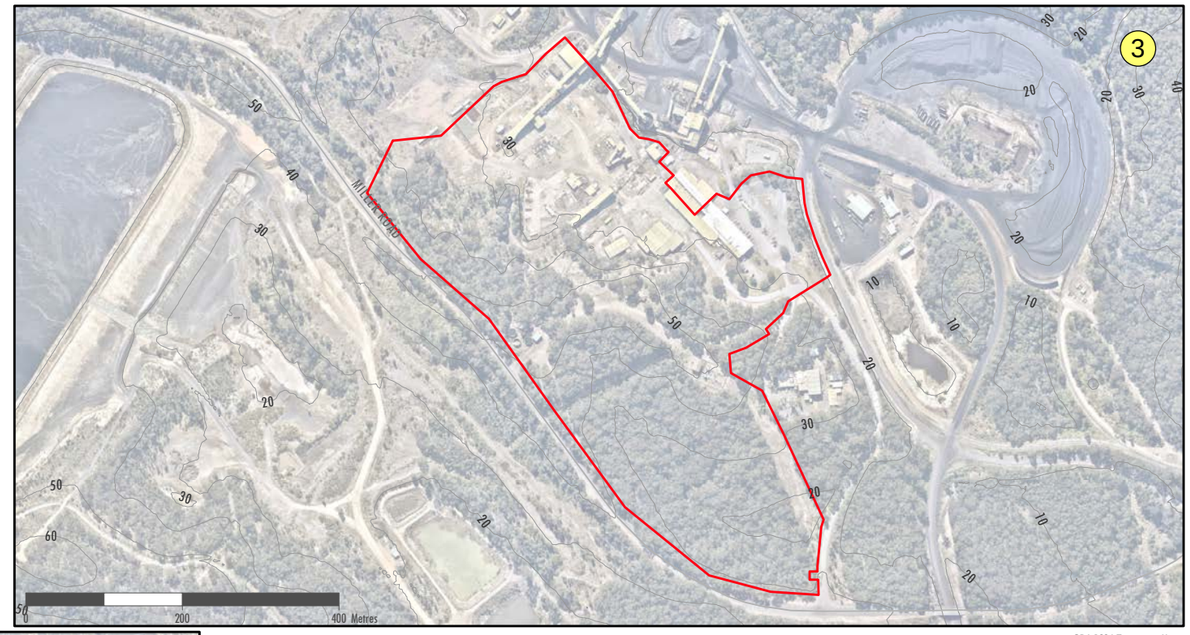
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GDA 1994 Transverse Mercator

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Project Assessment Area

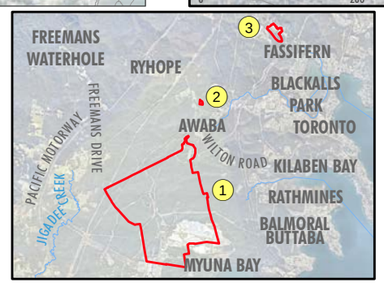


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

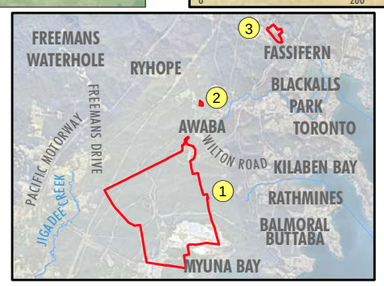
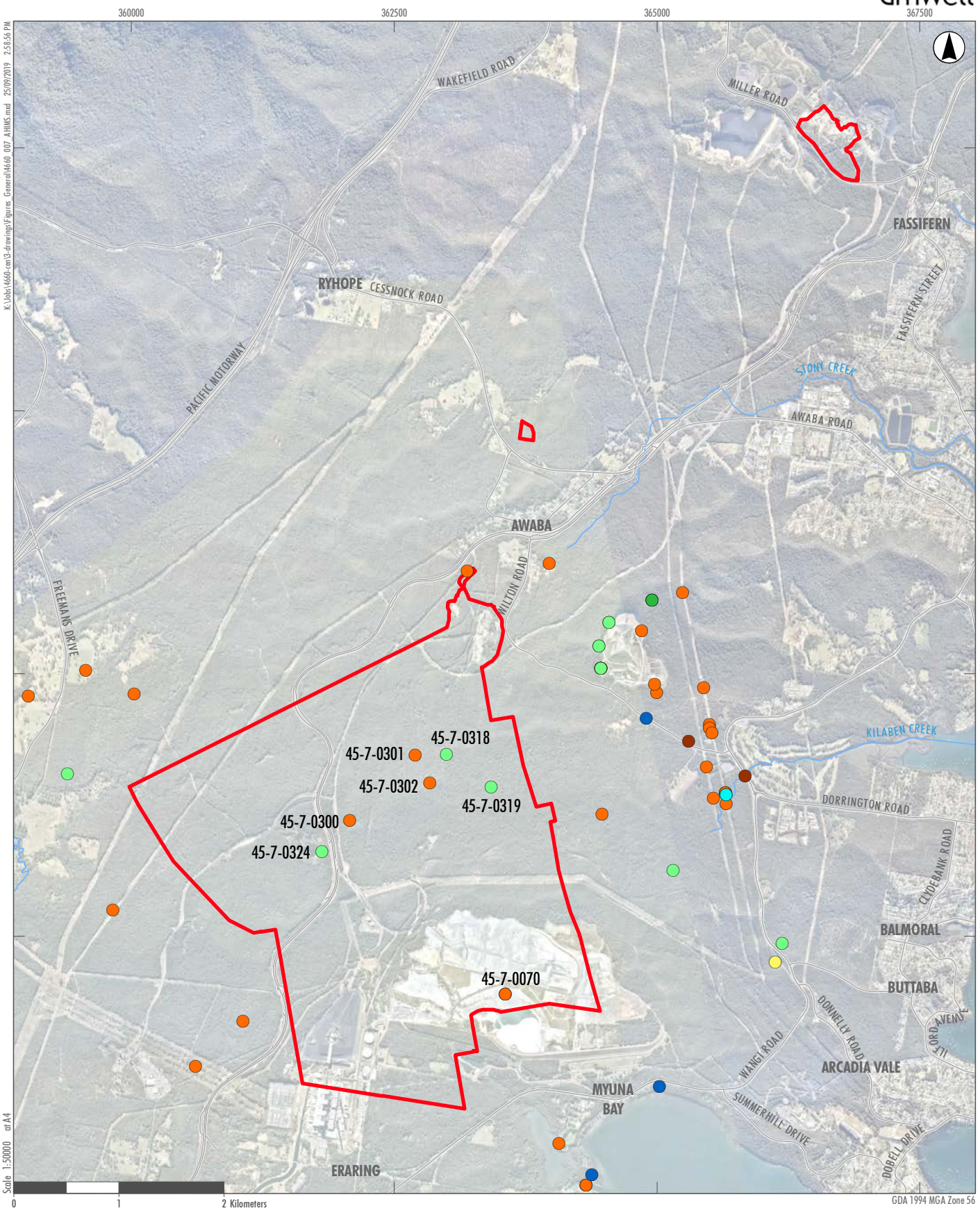


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



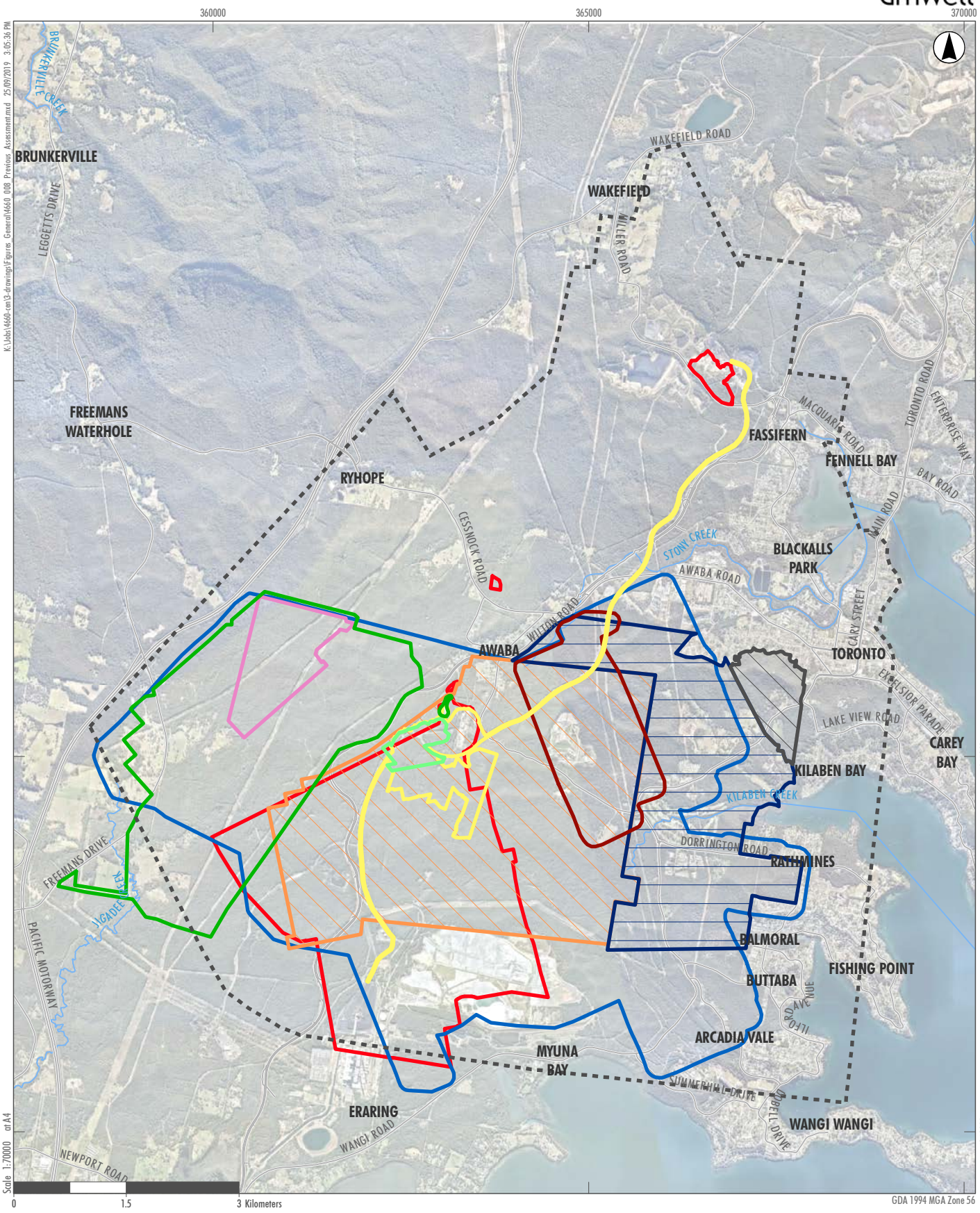
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



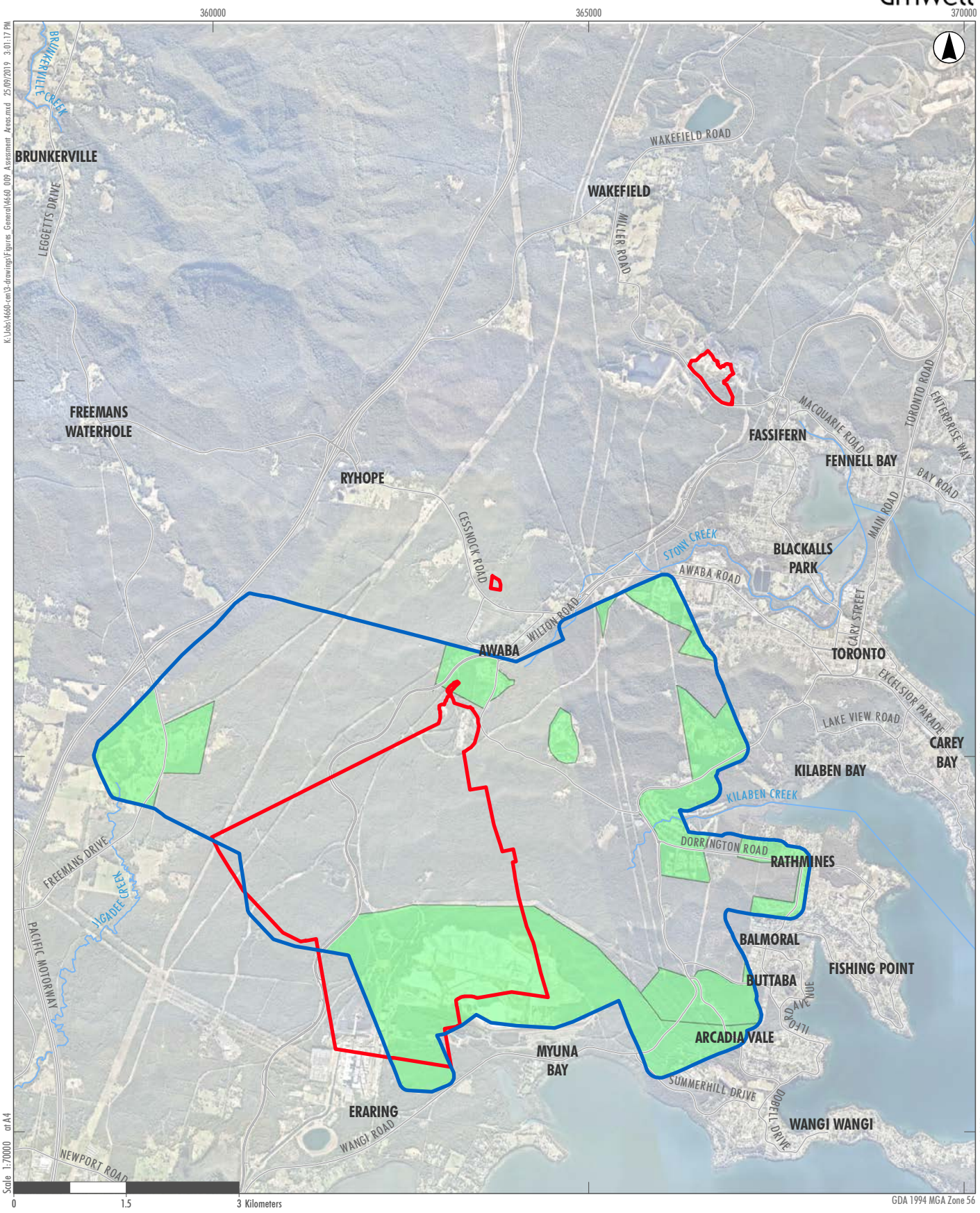
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Wannangini PtyLtd
Tracey Howie

Tracey.howie@wannangini.org

Dear Tracey Howie

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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Teralba NSW 2284

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Umwelt (Australia) Pty Limited
ABN: 18 059 519 041

1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

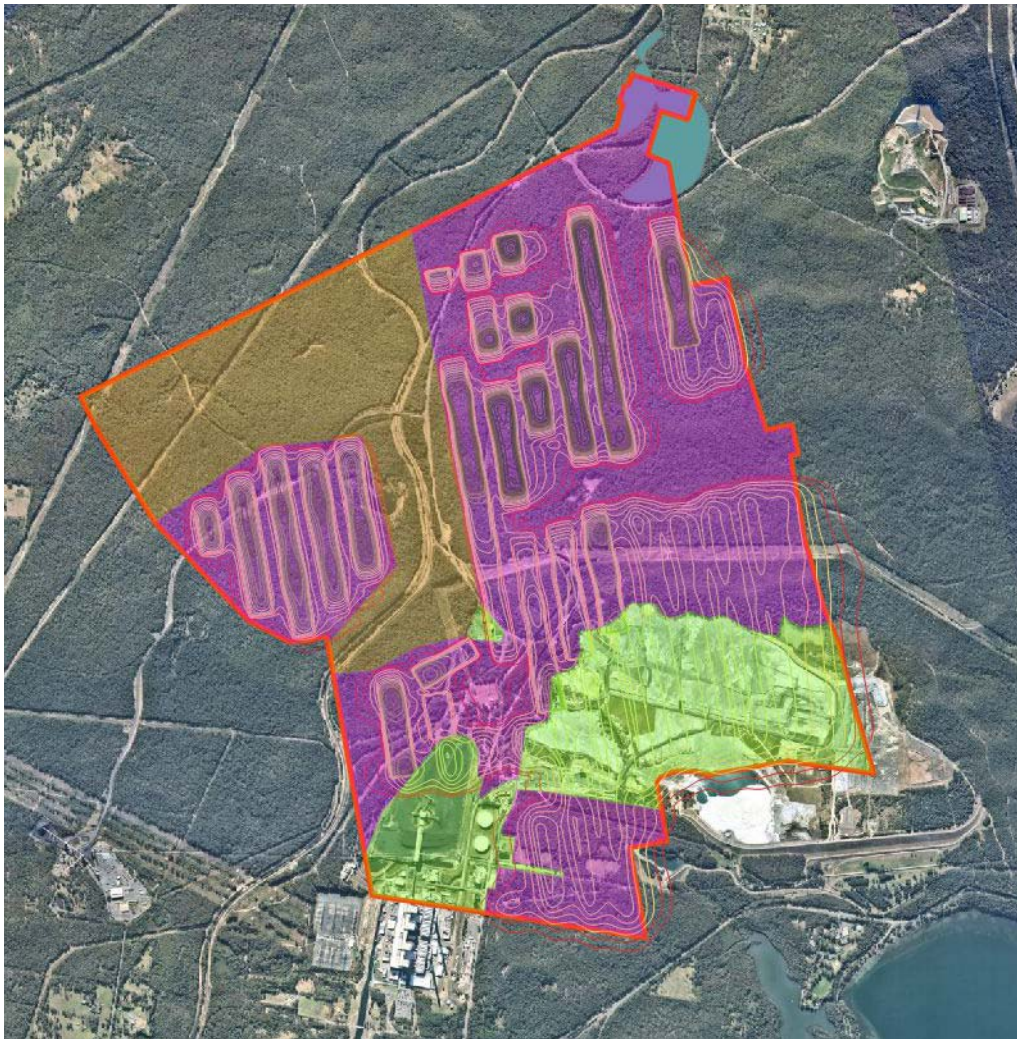


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

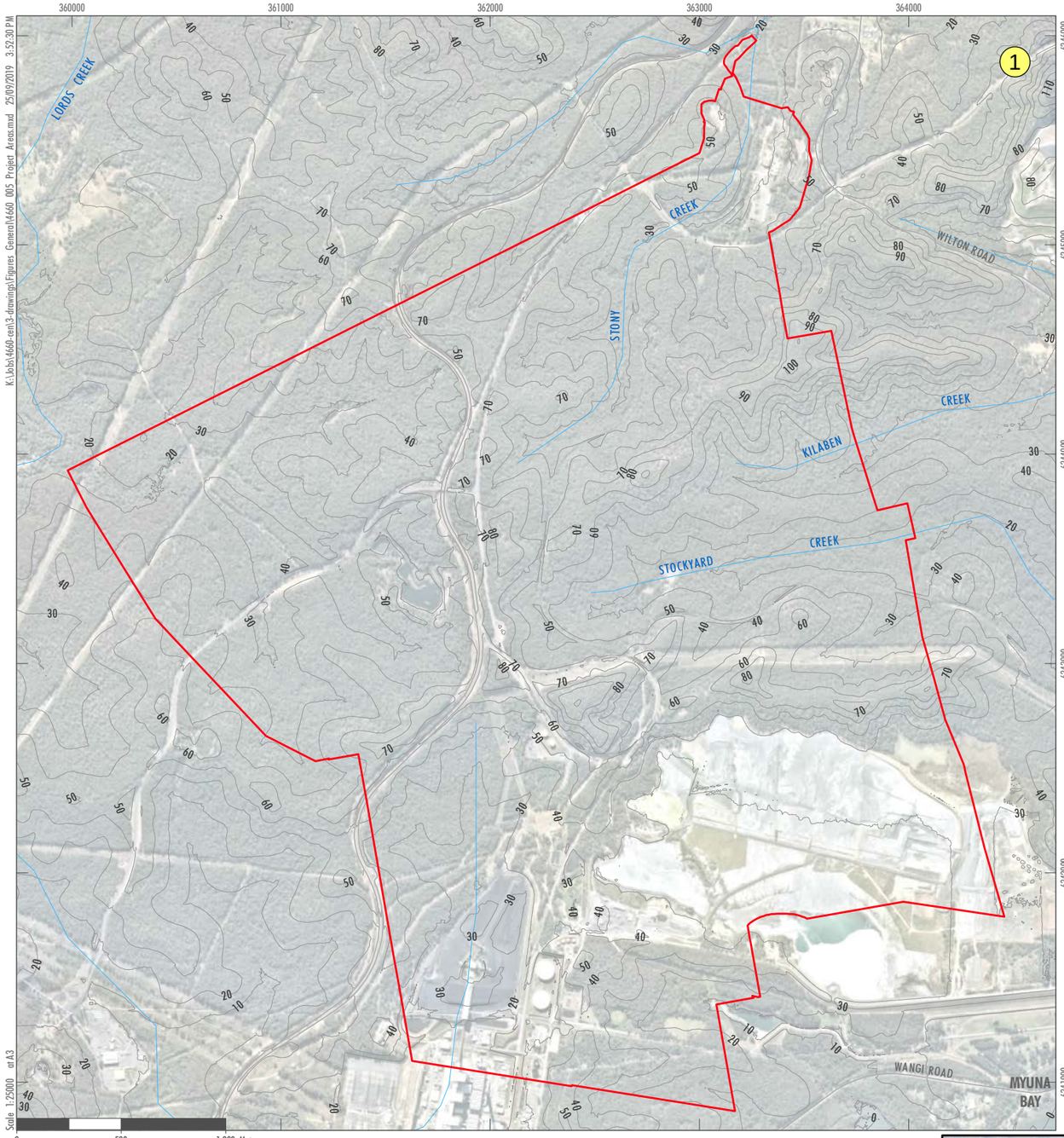
Name of Authorised Person: _____

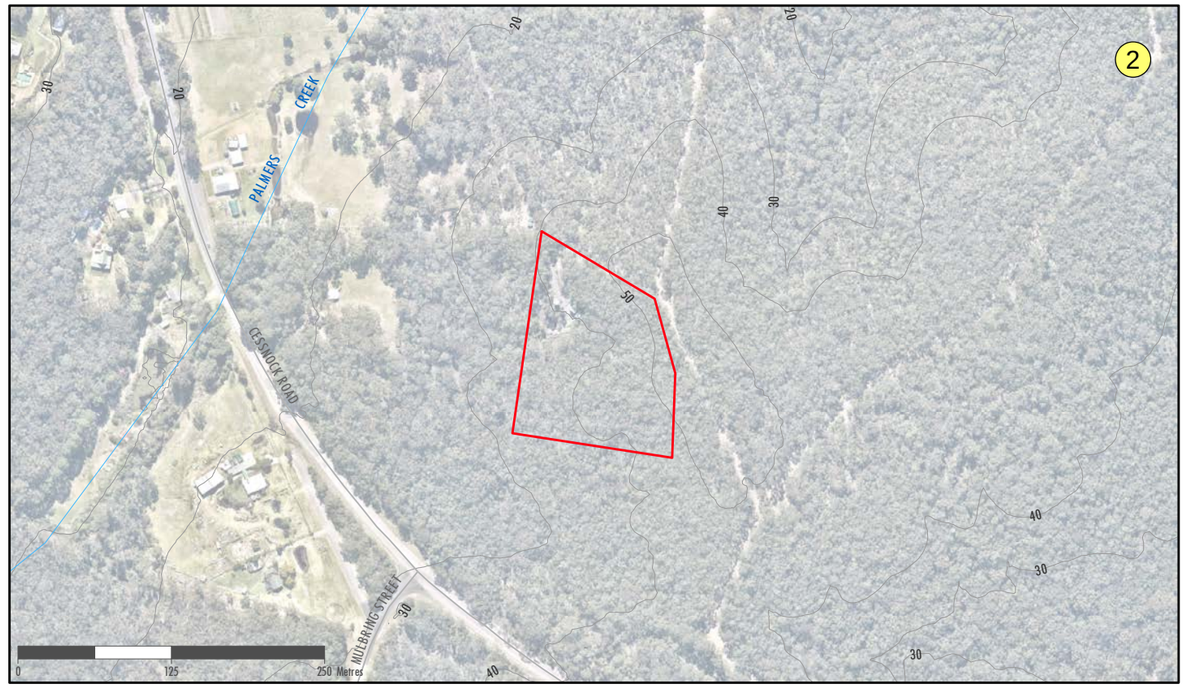
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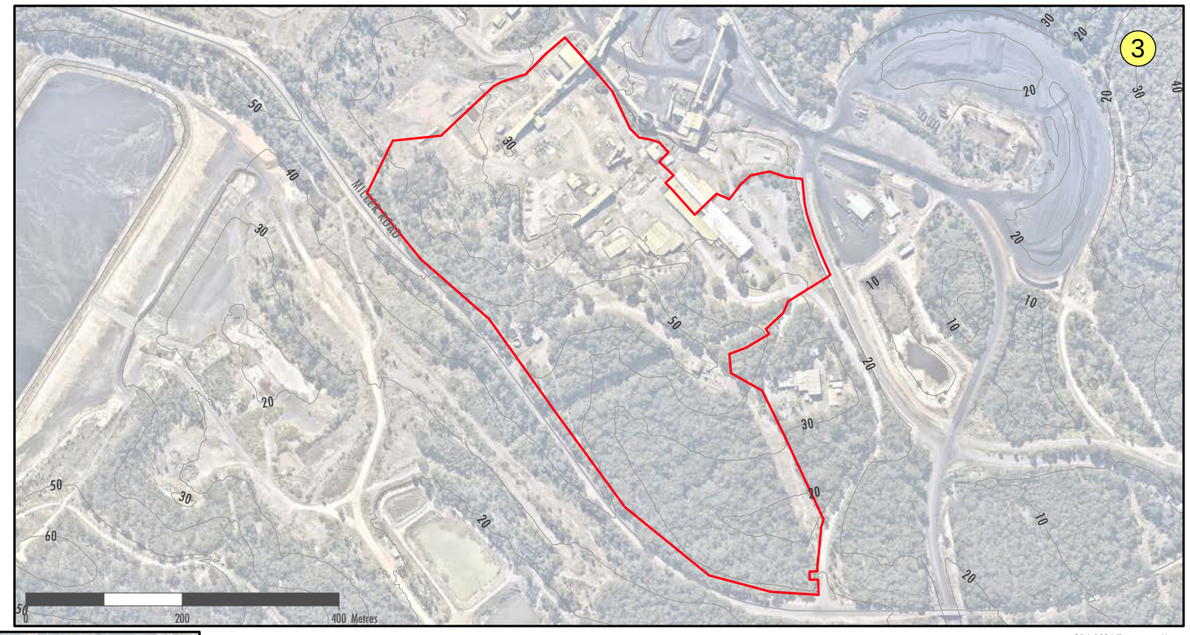
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GDA 1994 Transverse Mercator

Legend

Project Assessment Area

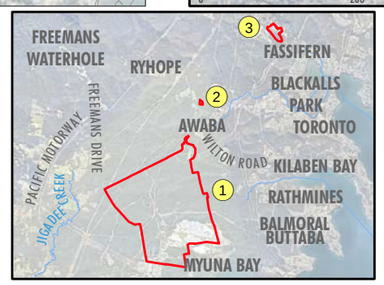


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

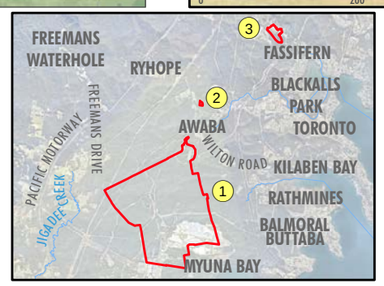
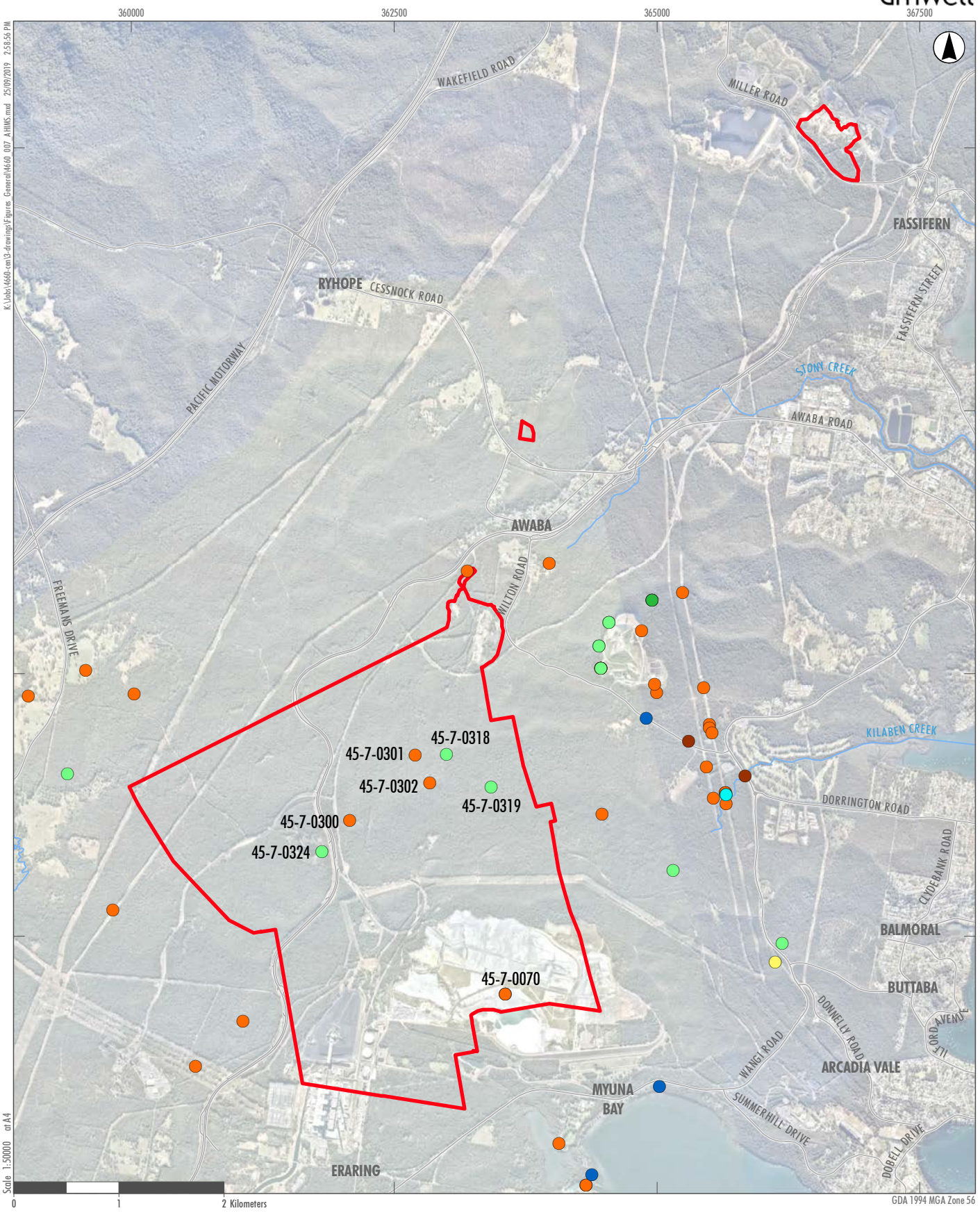


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



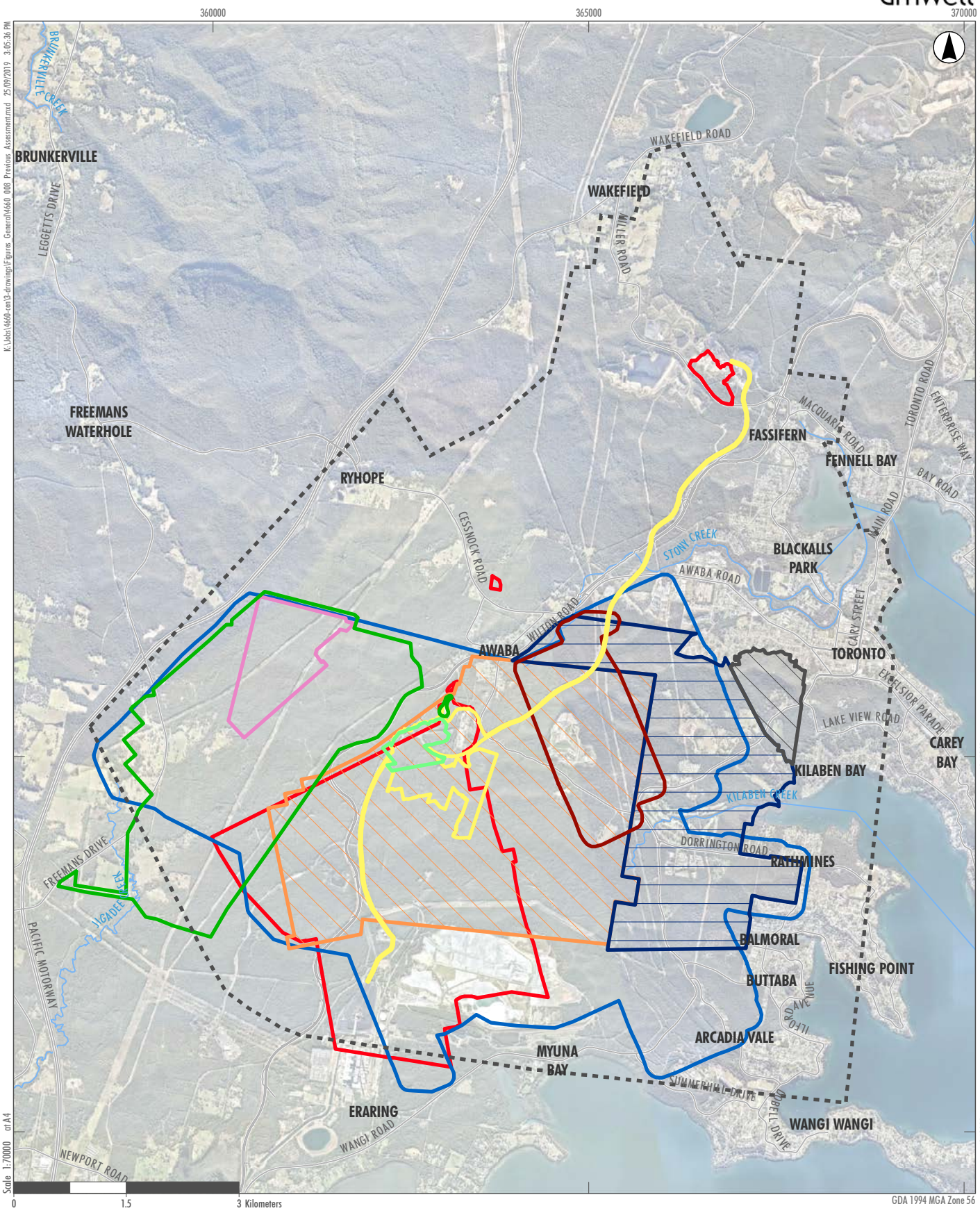
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



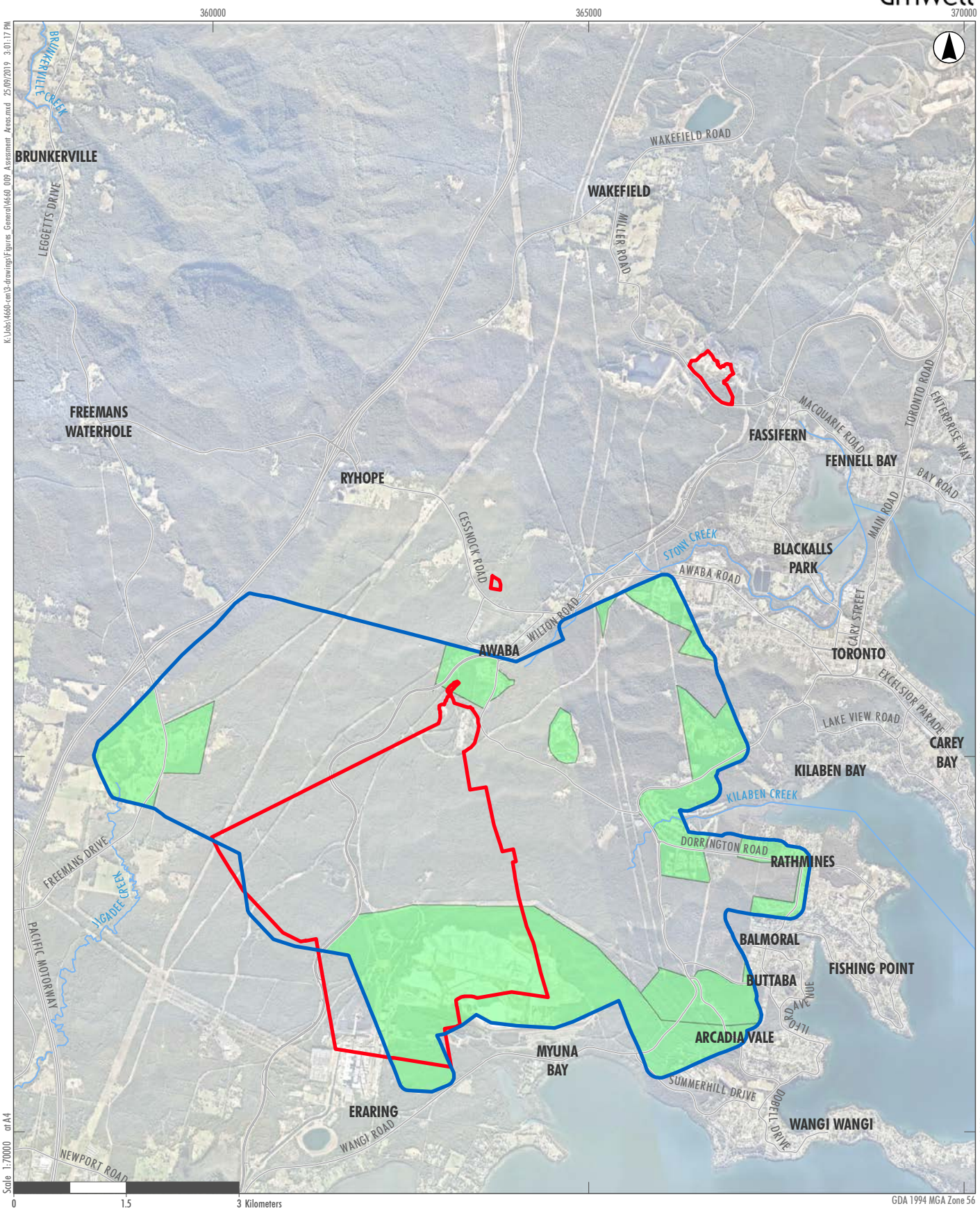
Legend

- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Didge Ngunawal Clan
Paul Boyd and Lilly Carroll
7 Siskin Street
QUAKERS HILL NSW 2763

didgengunawalclan@yahoo.com.au

Dear Paul Boyd and Lilly Carroll

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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Umwelt (Australia) Pty Limited
ABN: 18 059 519 041

1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

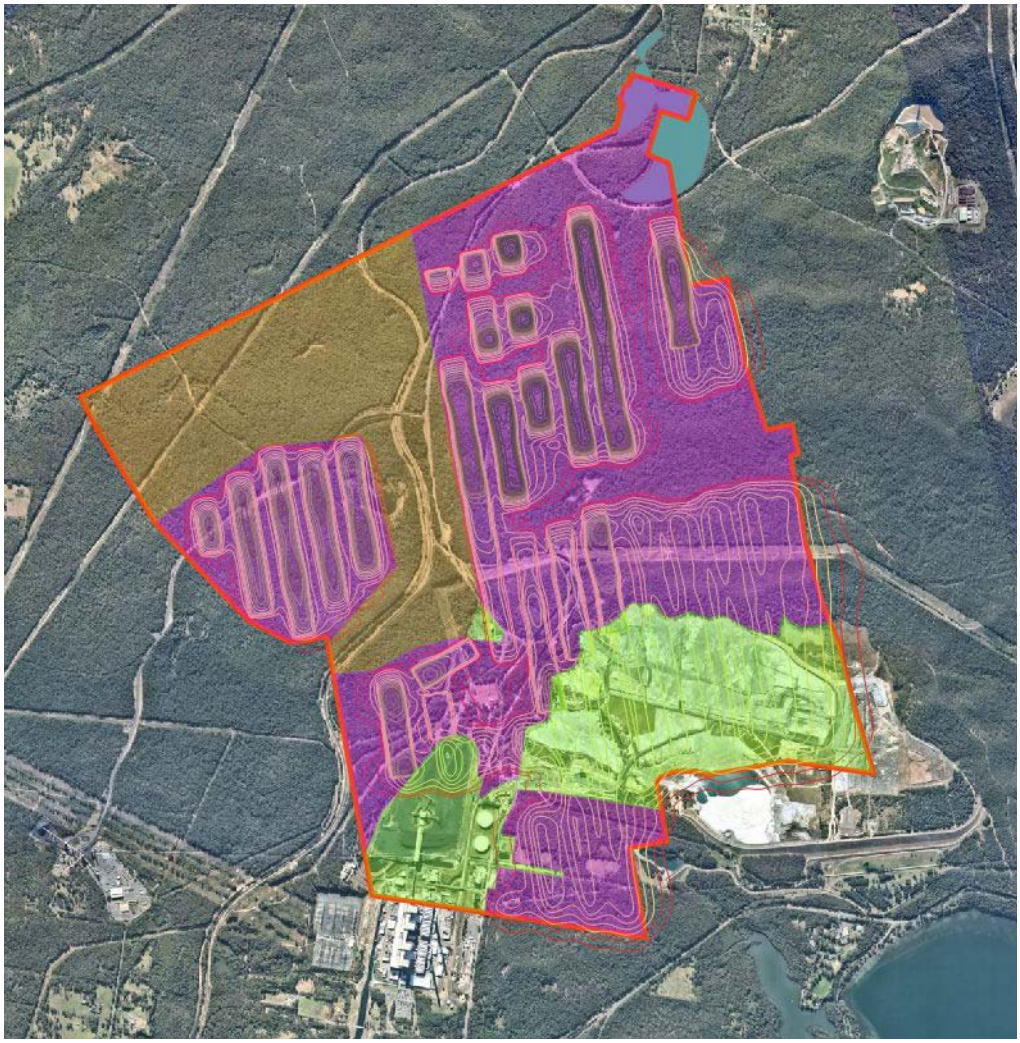


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

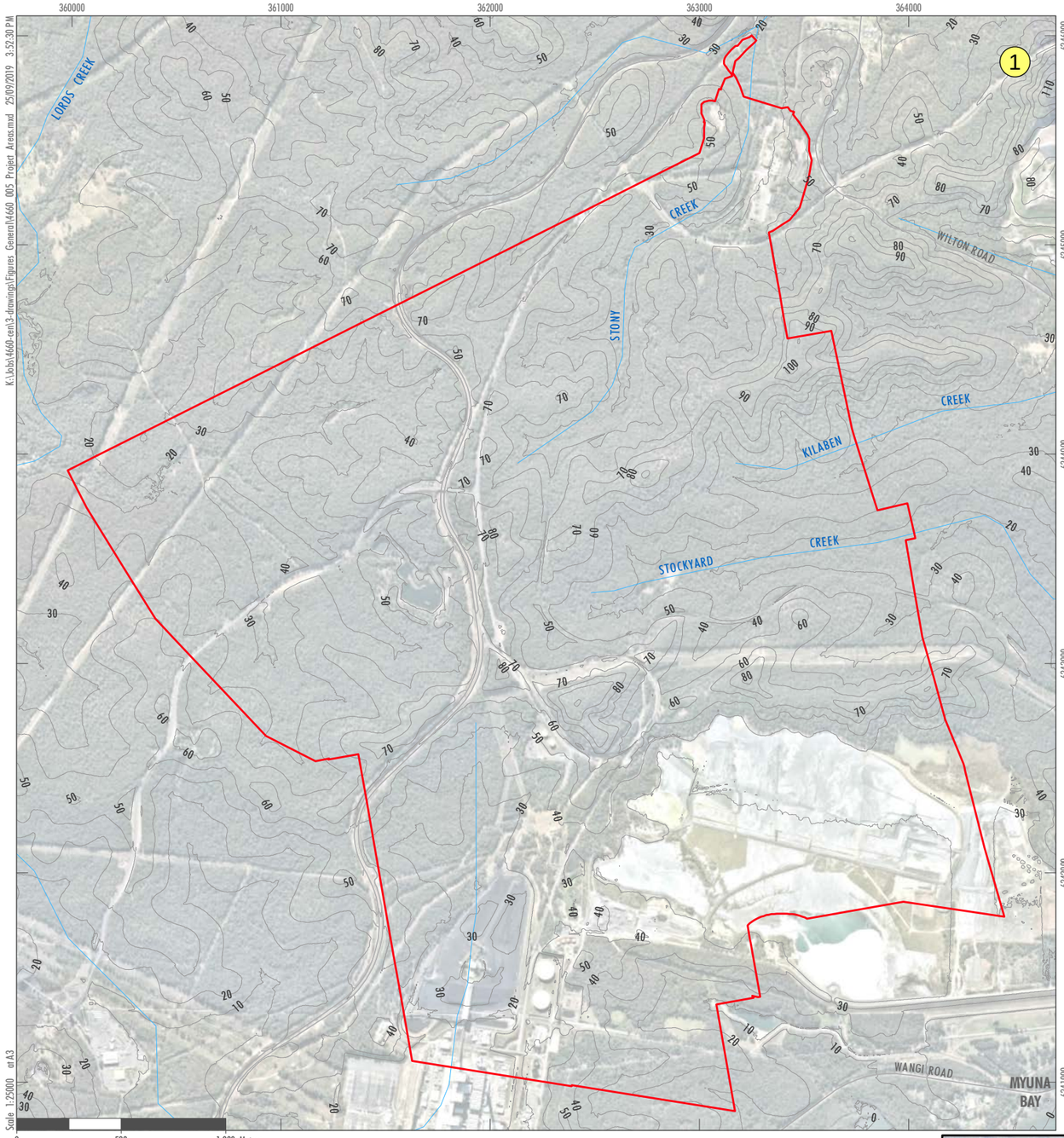
Name of Authorised Person: _____

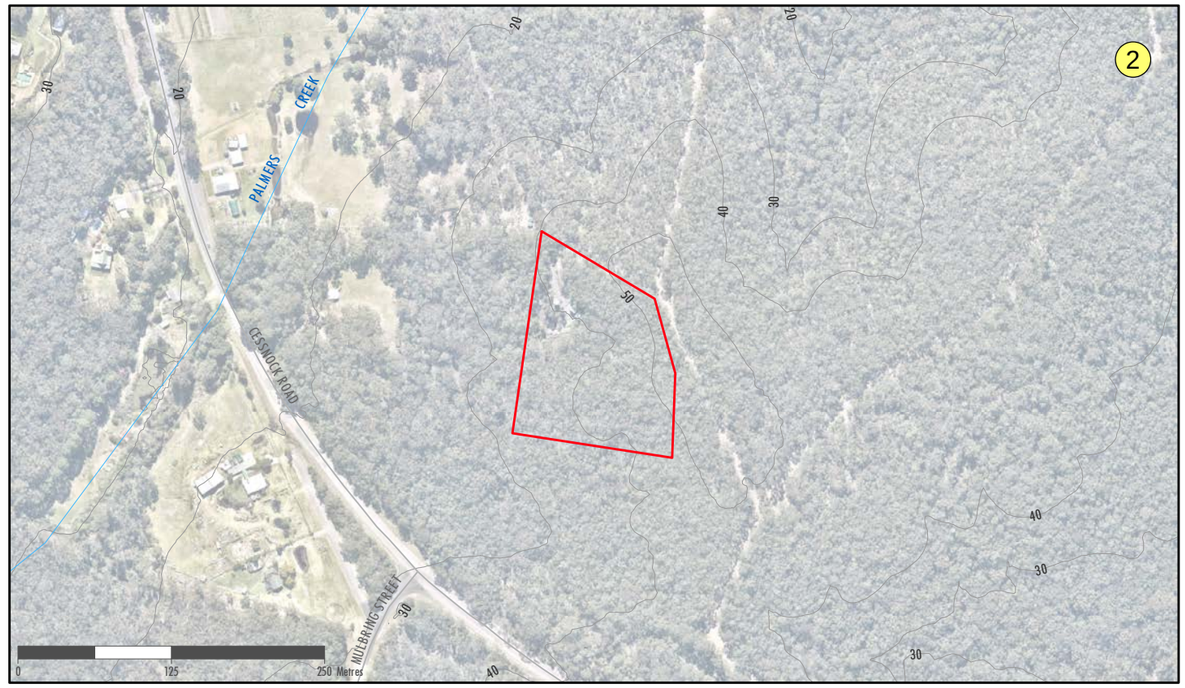
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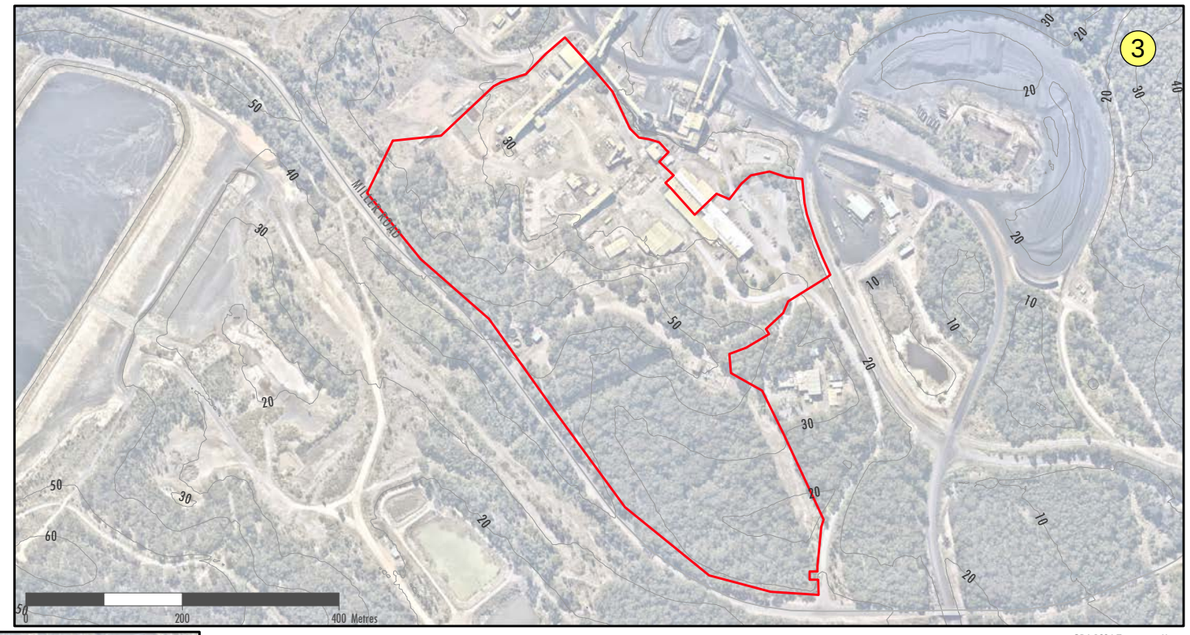
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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

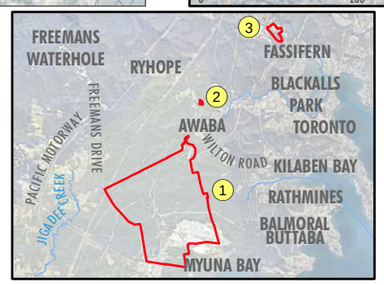


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

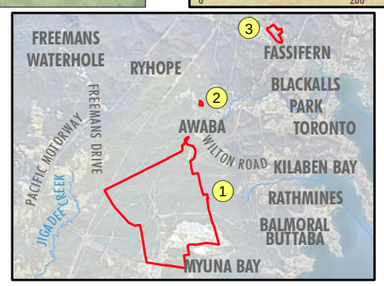
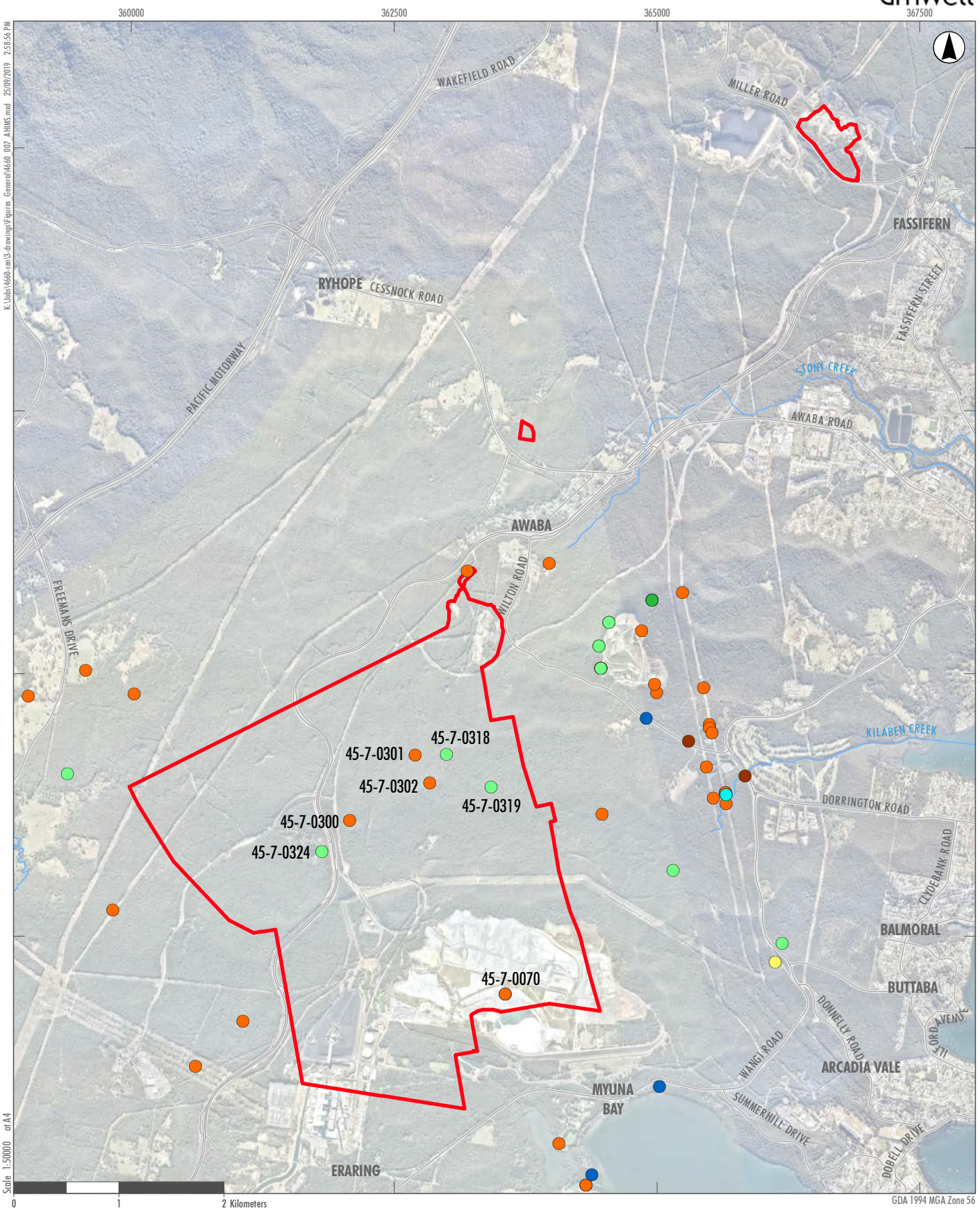


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



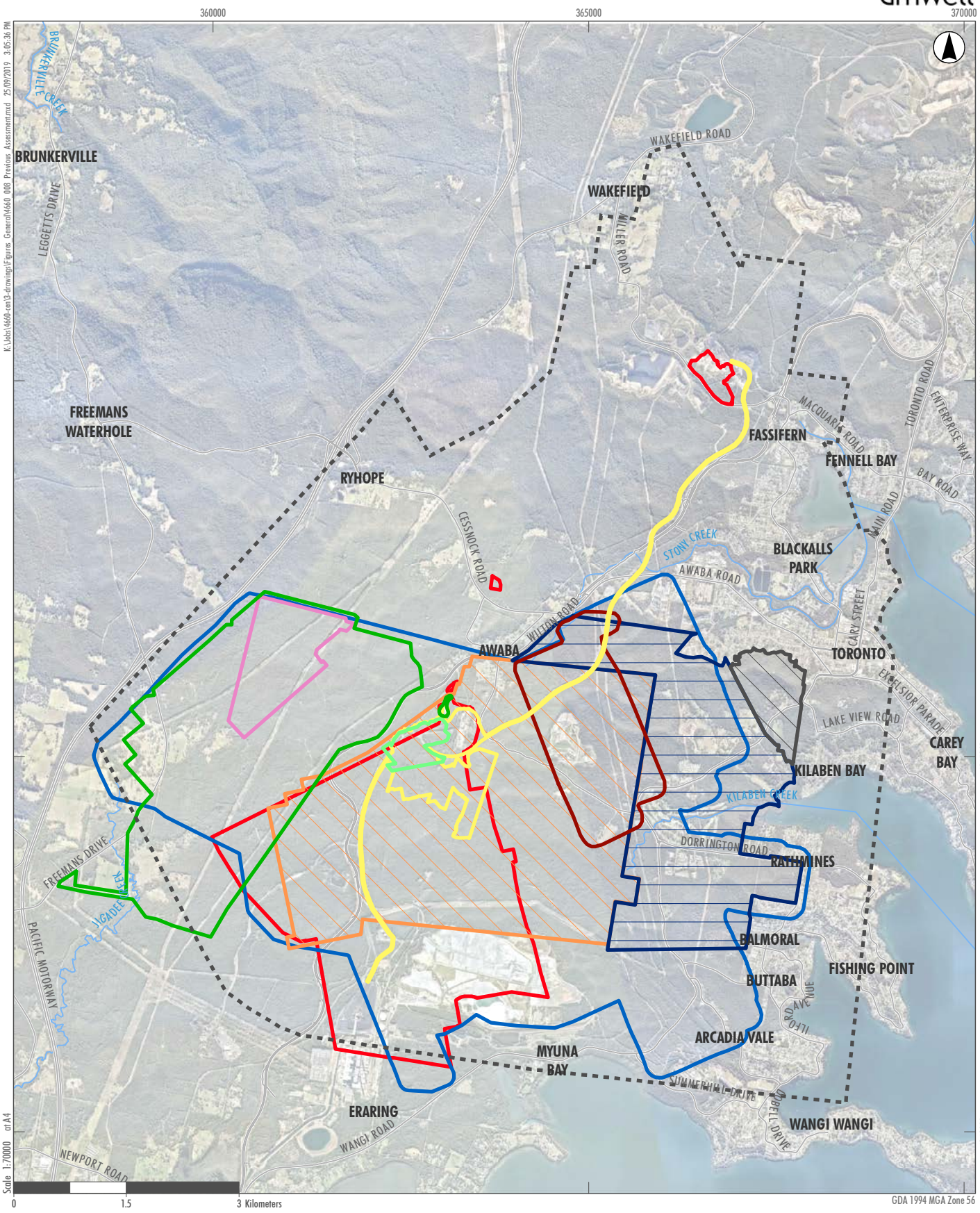
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



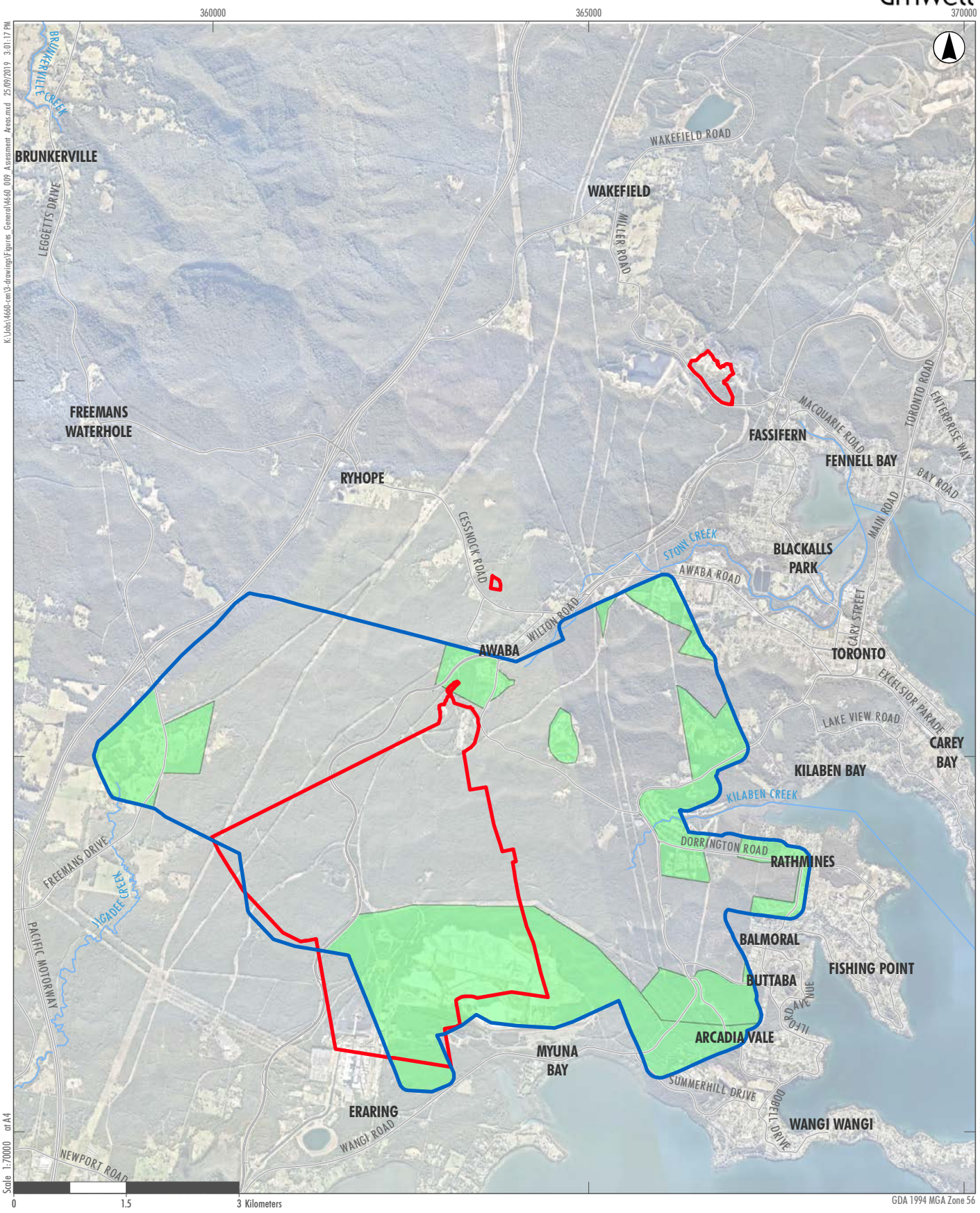
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Awabakal Descendants Traditional Owners Aboriginal Corporation (ADTOAC)
Peter Leven
PO Box 137
BUDGEWOI NSW 2262

peterleven@y7mail.com

Dear Peter Leven

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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Umwelt (Australia) Pty Limited
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1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

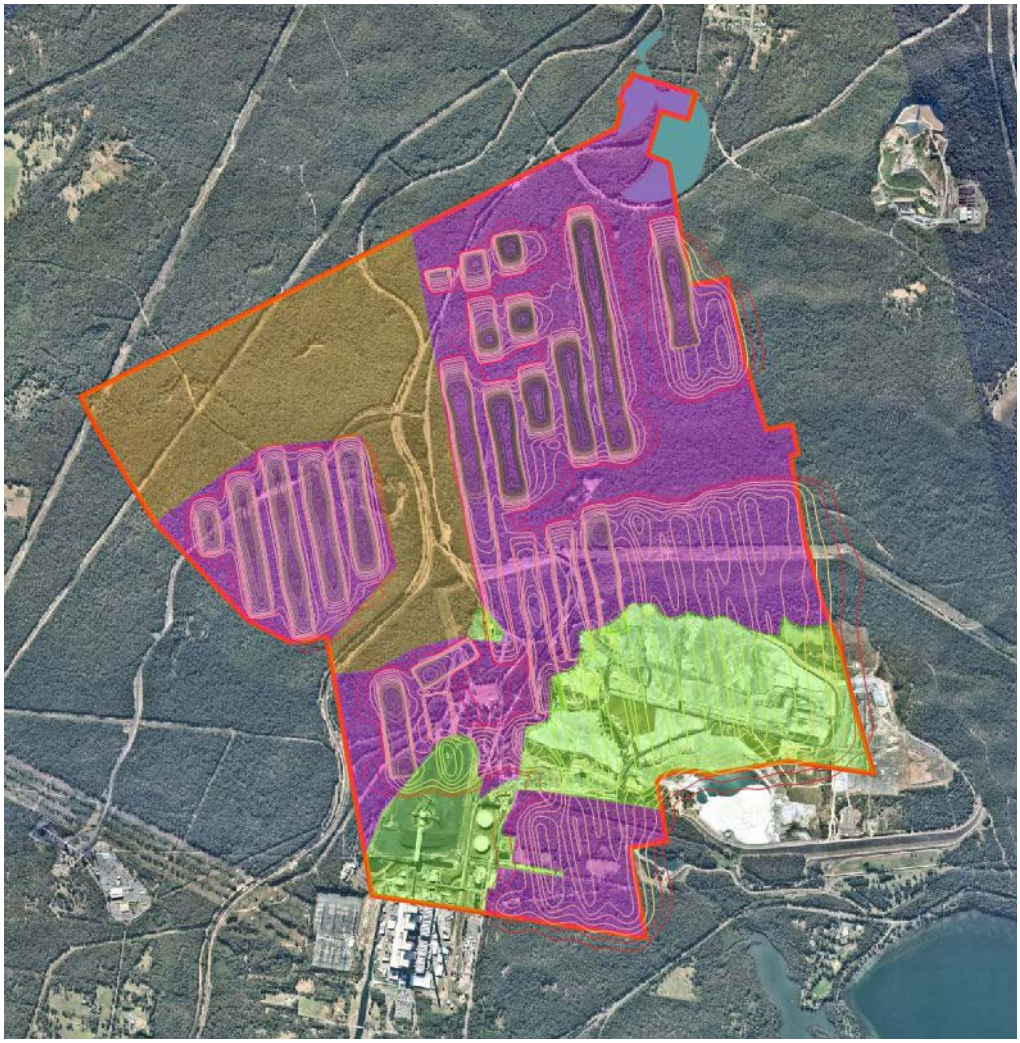


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

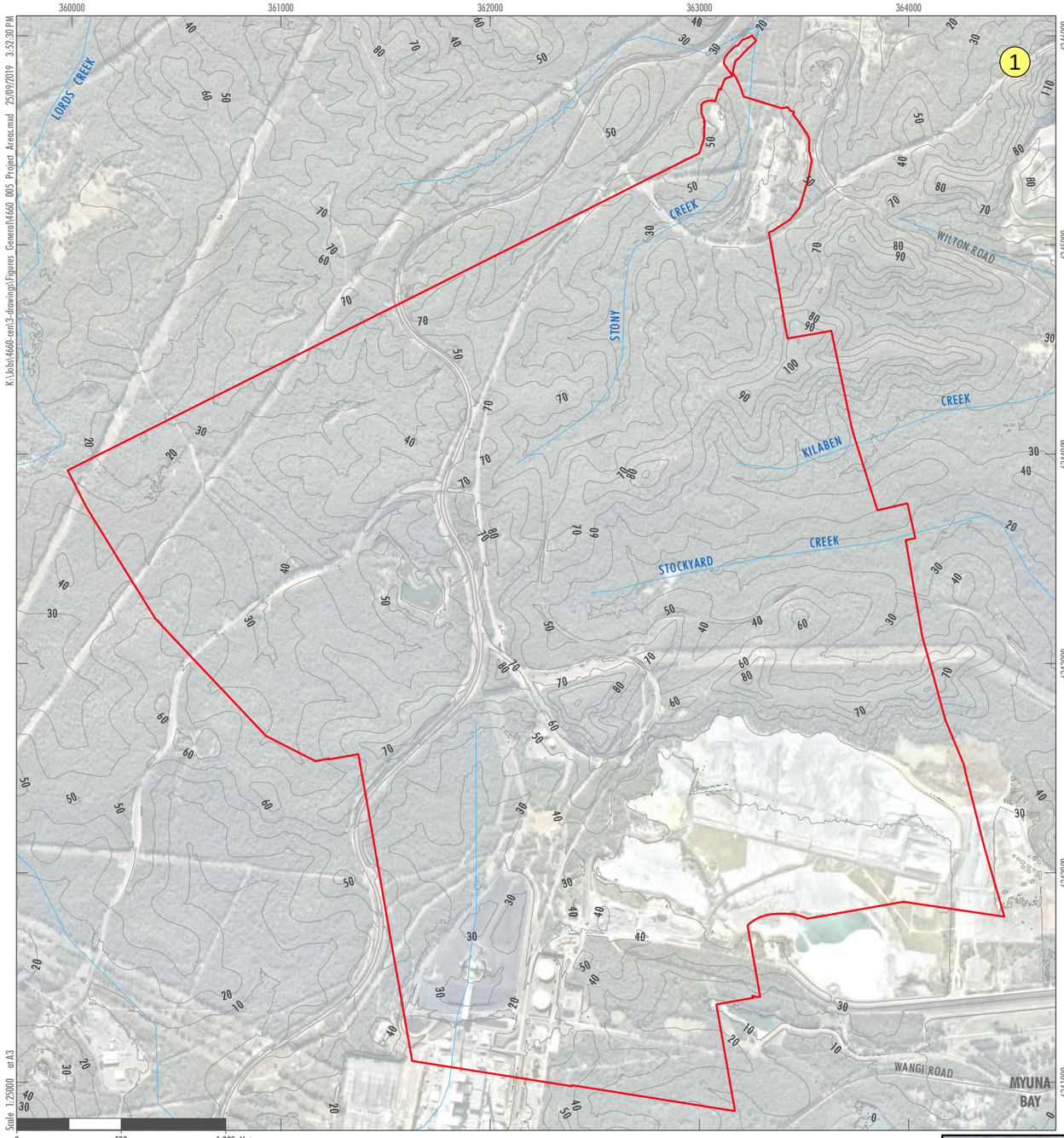
Name of Authorised Person: _____

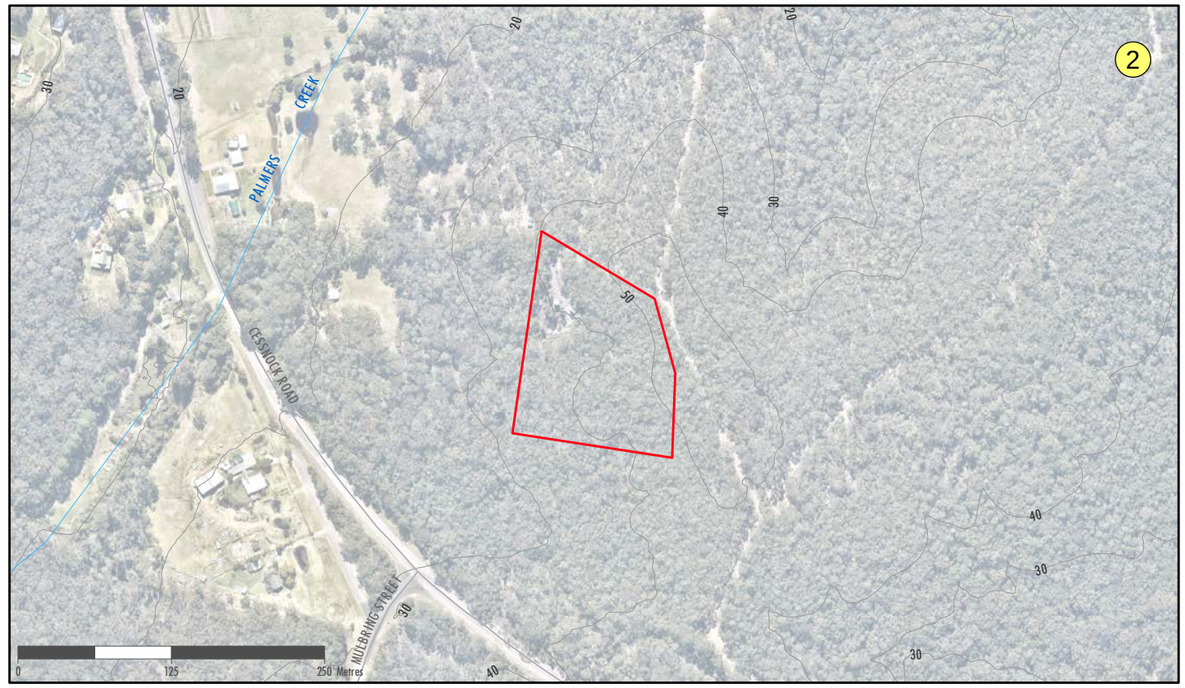
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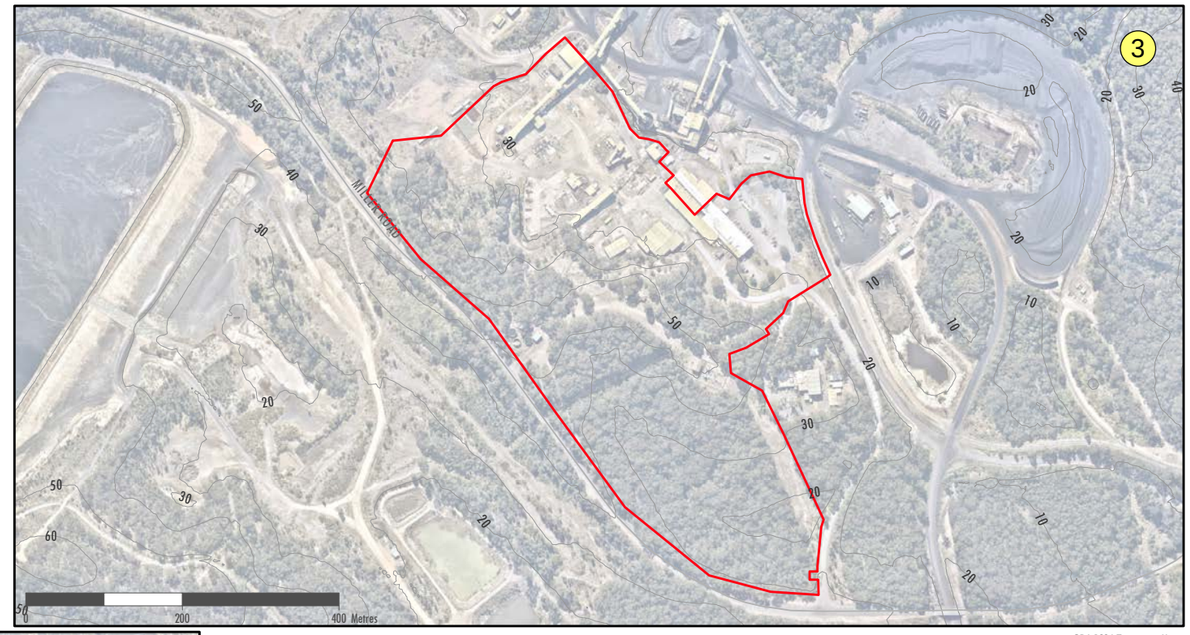
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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

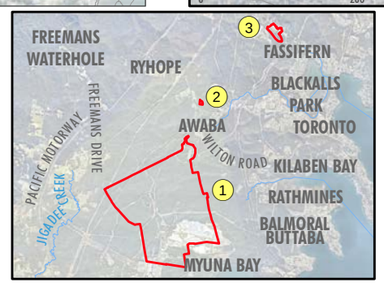


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

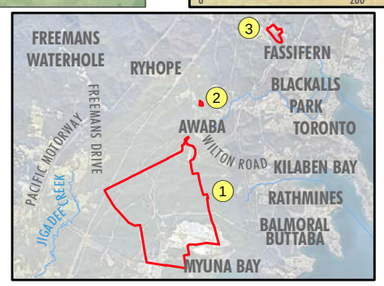
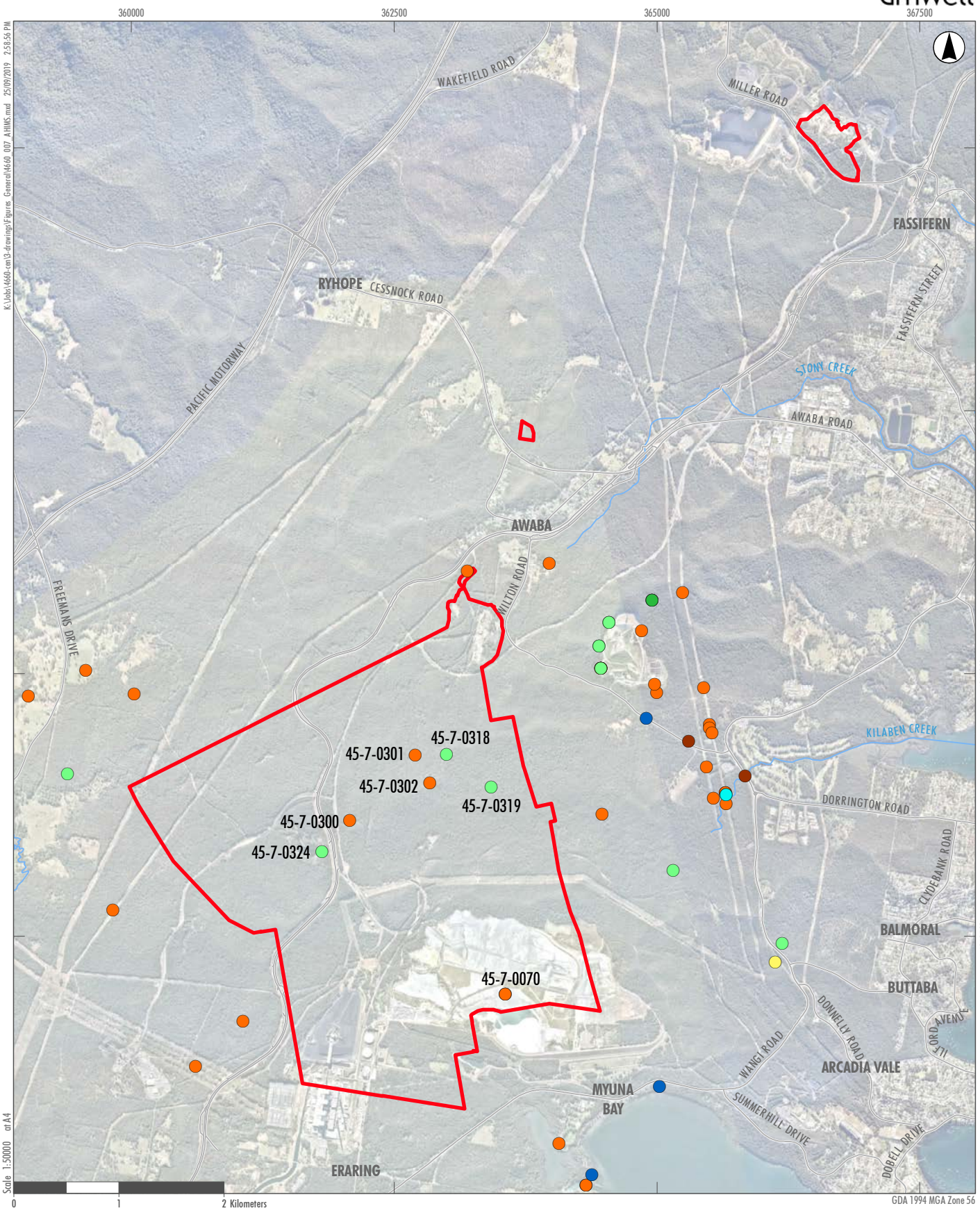


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



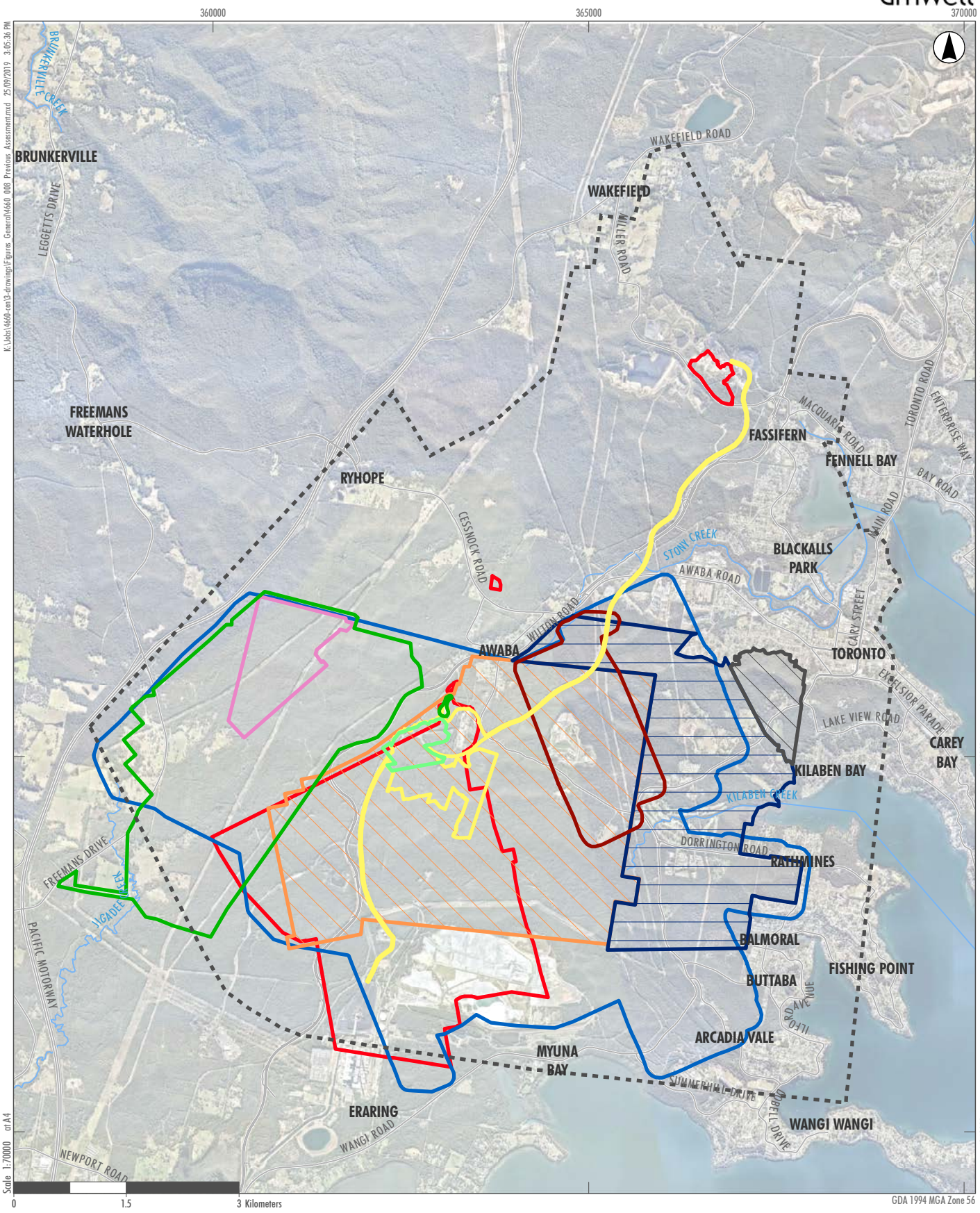
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



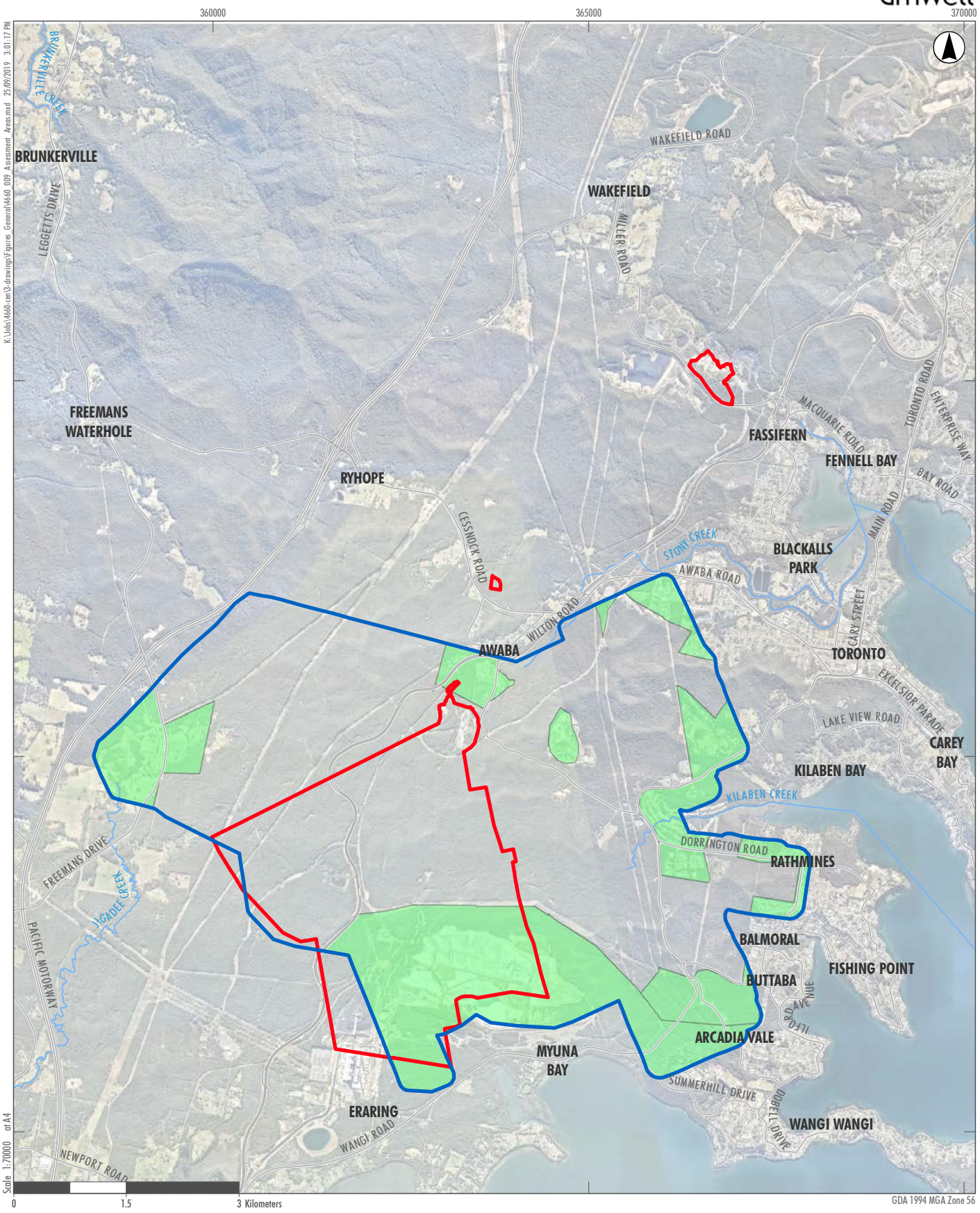
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Awabakal Traditional Owners Aboriginal Corporation (ATOAC)
Kerrie Brauer
PO Box 122
RUTHERFORD NSW 2320

Kerrie@awabakal.com.au

Dear Kerrie Brauer

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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Umwelt (Australia) Pty Limited
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1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

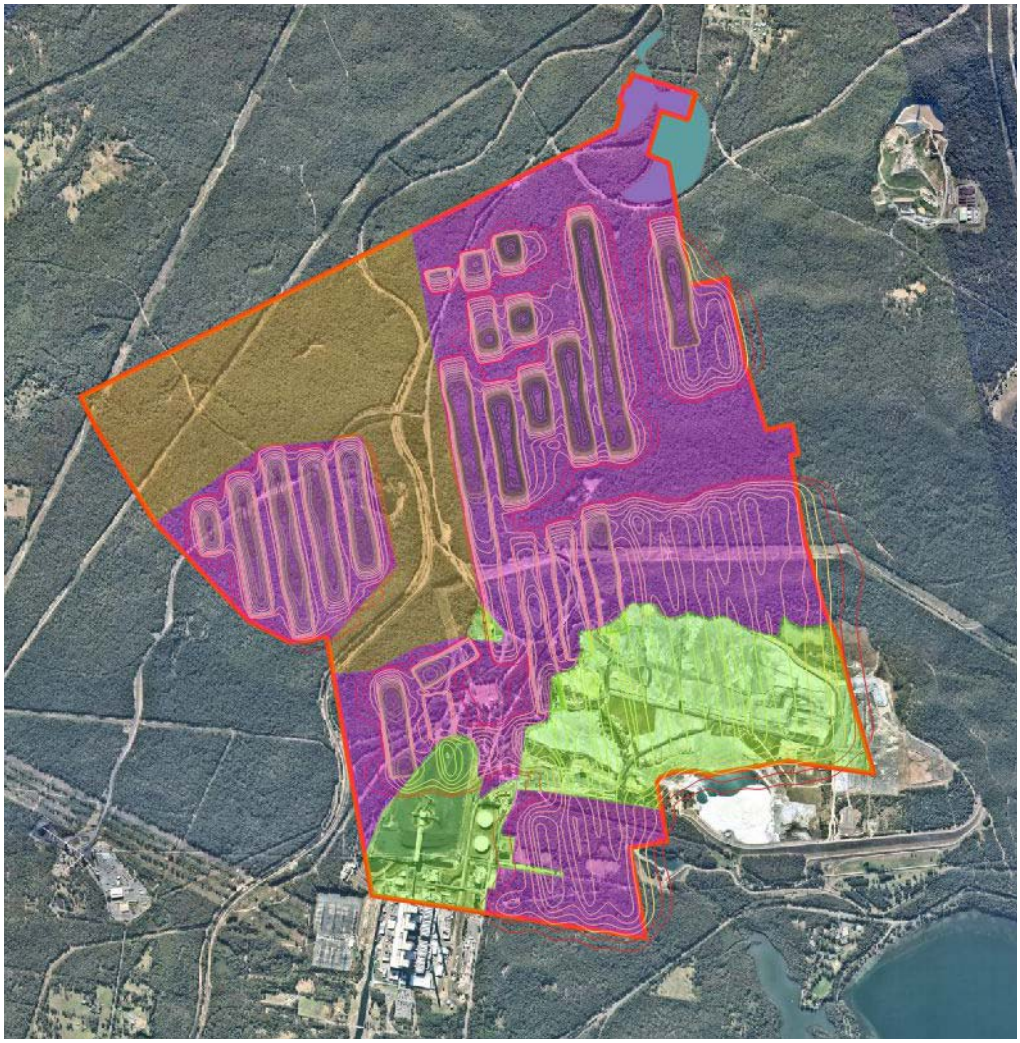


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

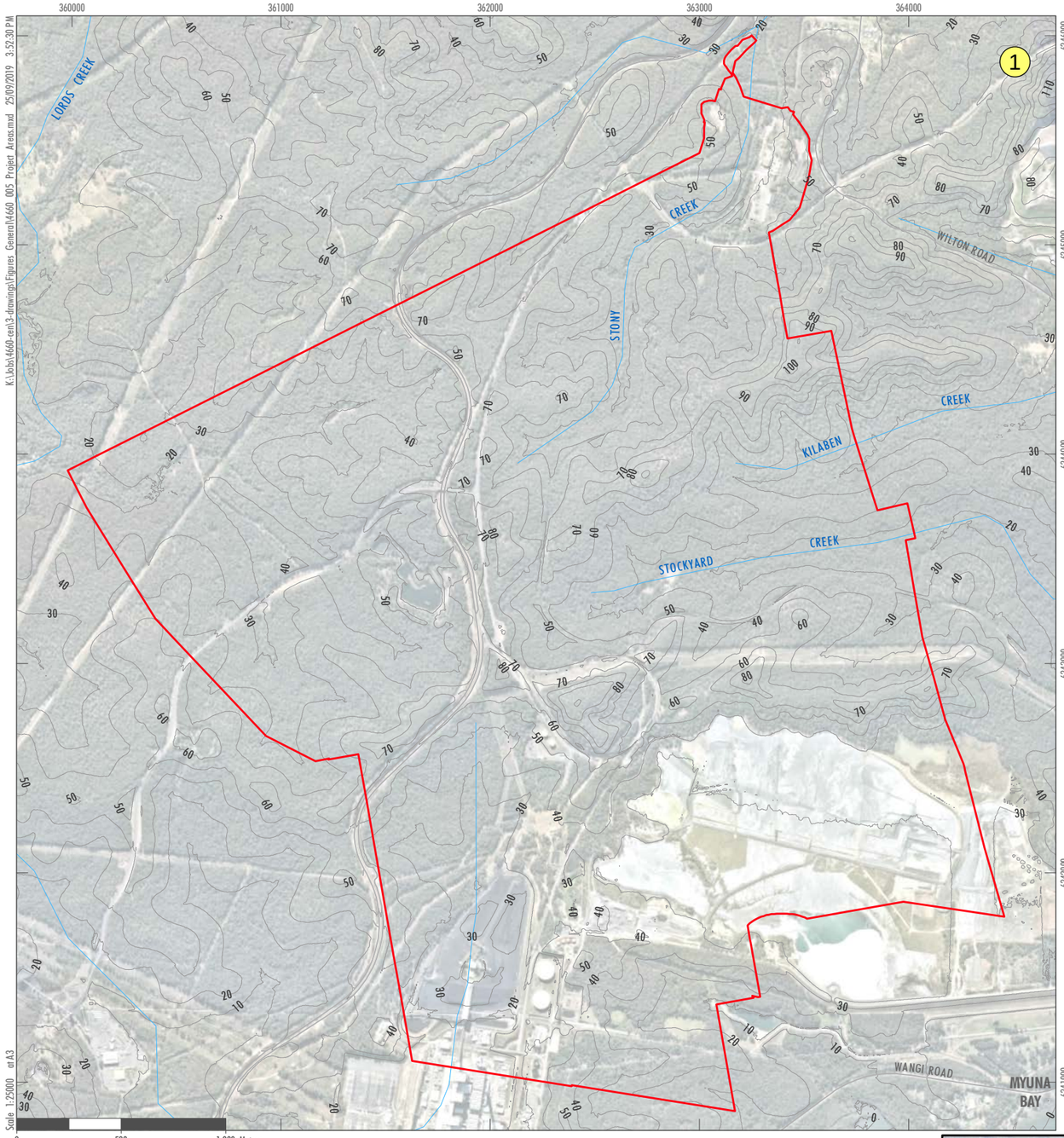
Name of Authorised Person: _____

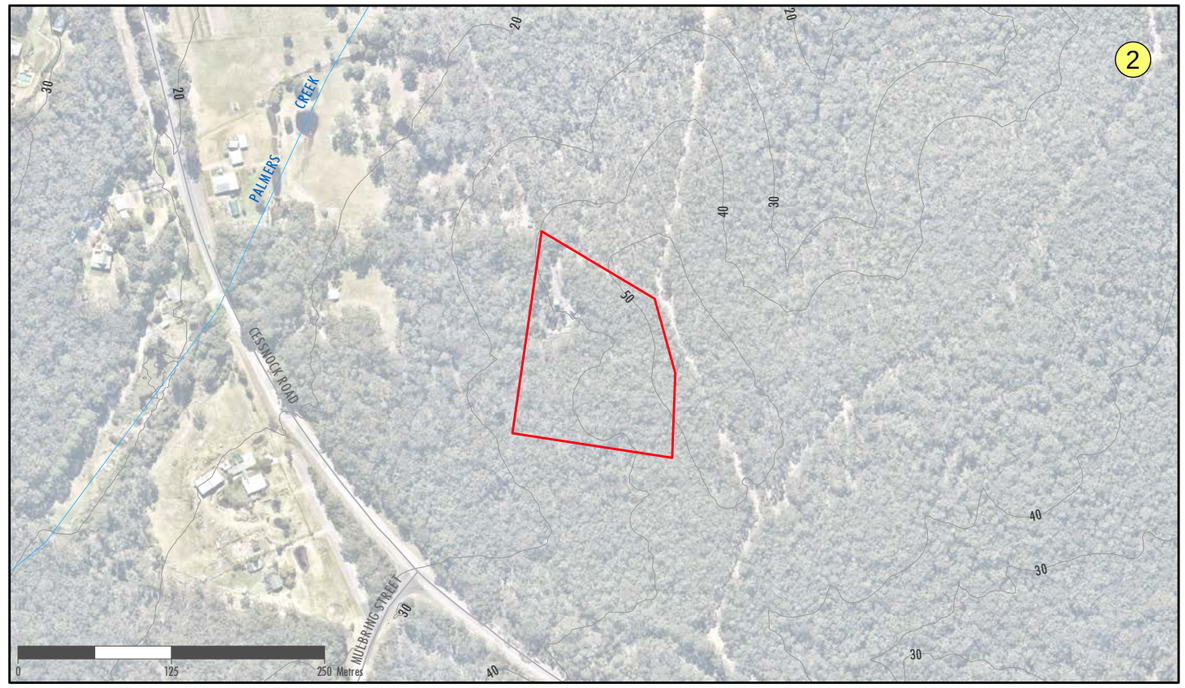
Signature: _____

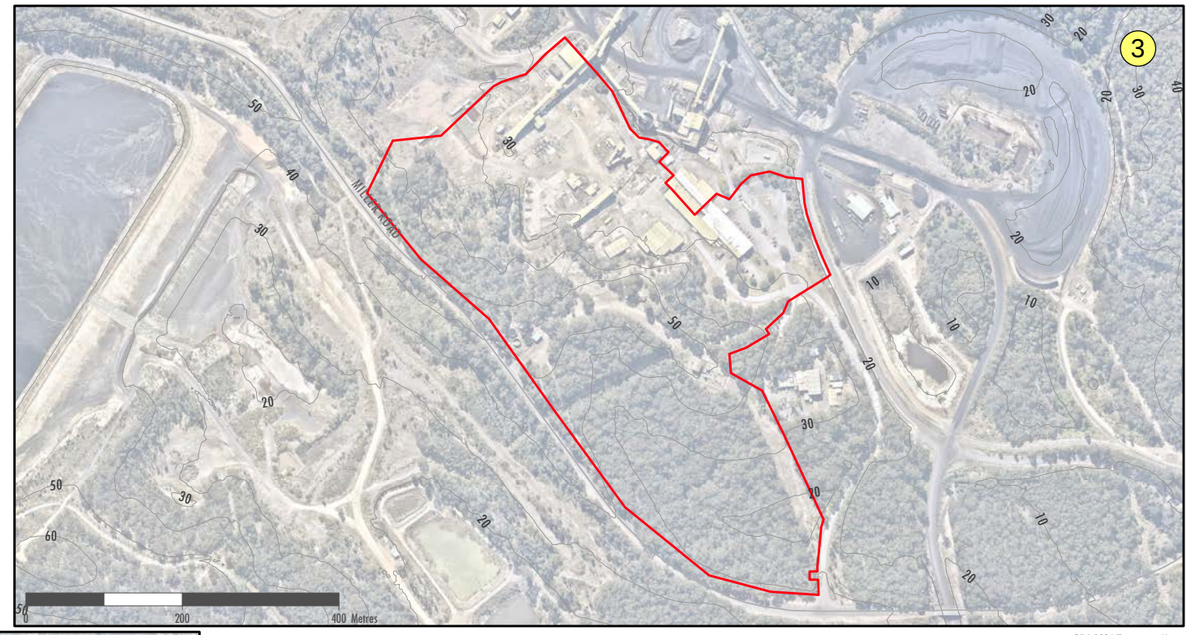
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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

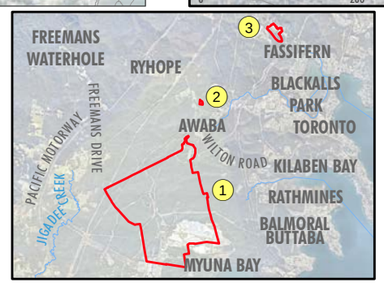


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

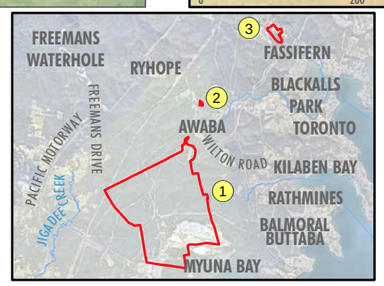
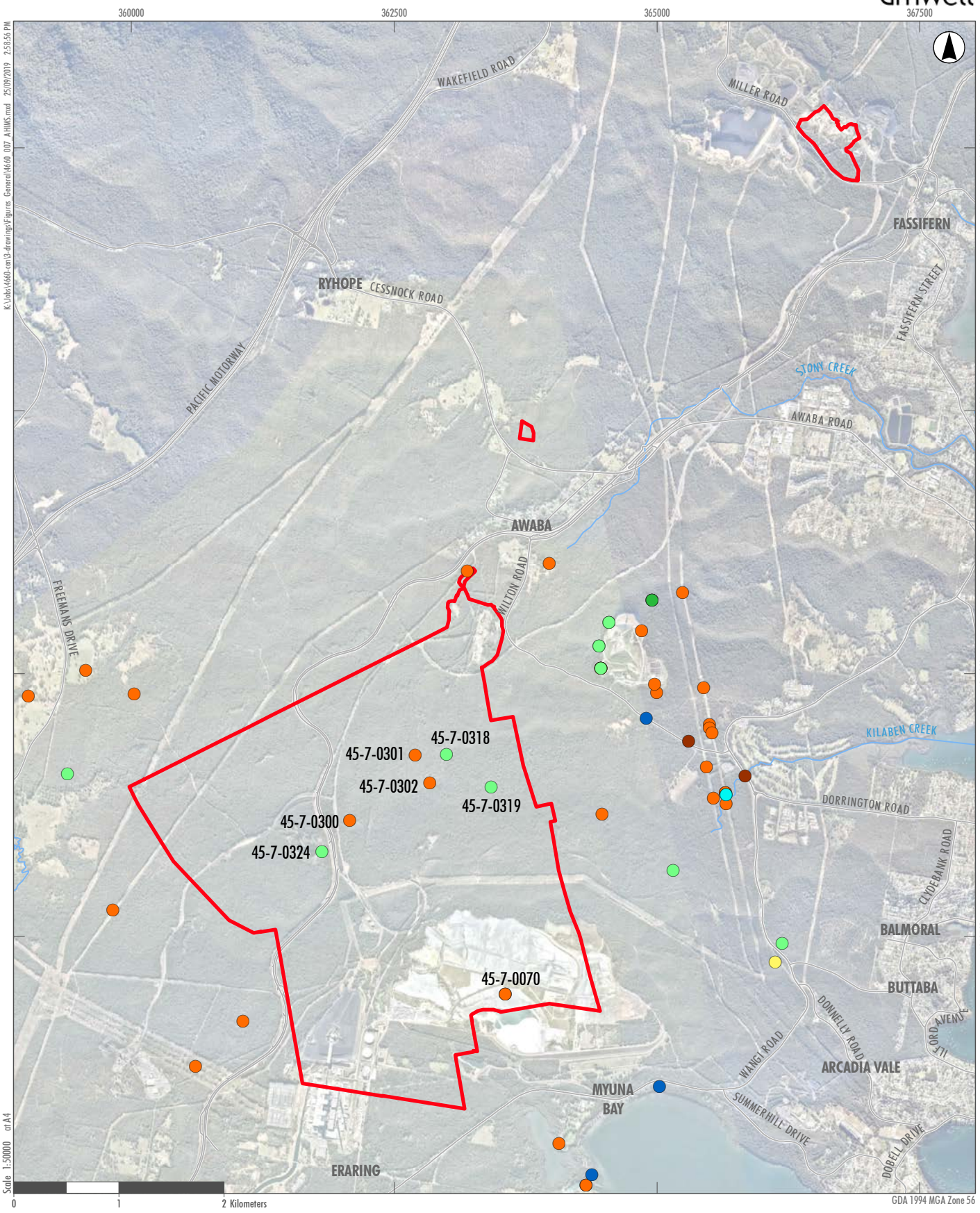


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



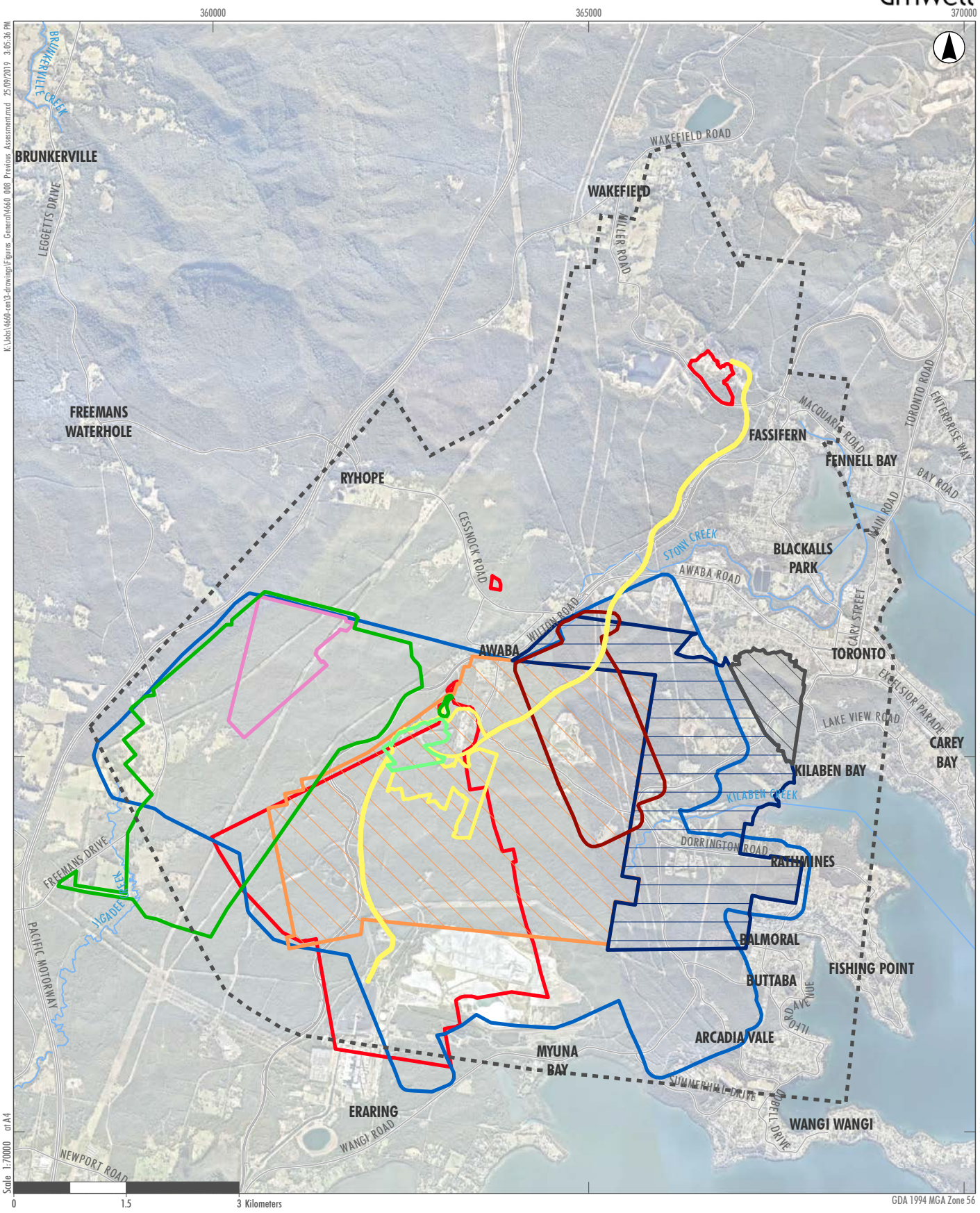
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



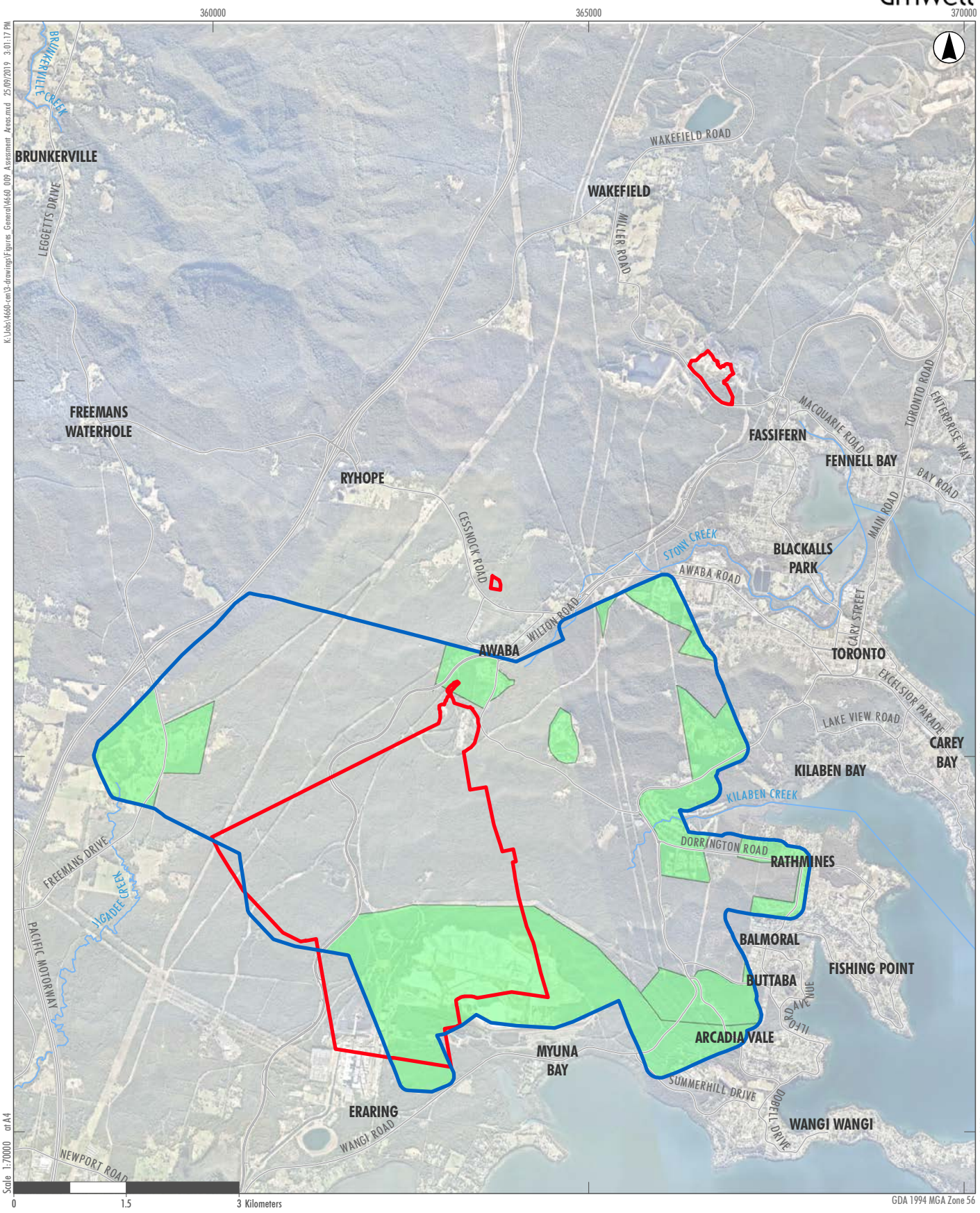
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Corroboree Aboriginal Corporation
Marilyn Carroll-Johnson
PO Box 3340
ROUSE HILL NSW 2155

corroboreecorp@bigpond.com

Dear Marilyn Carroll-Johnson

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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Umwelt (Australia) Pty Limited
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1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

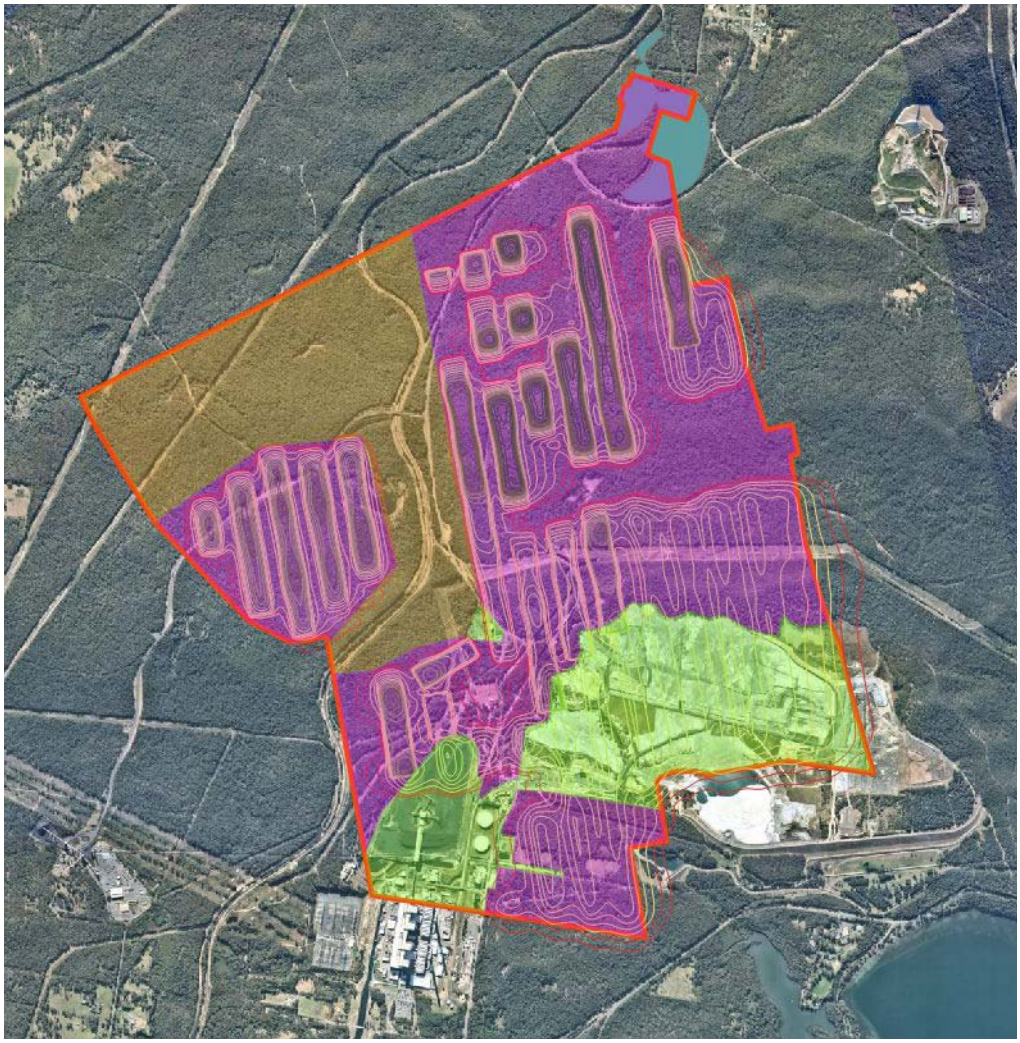


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

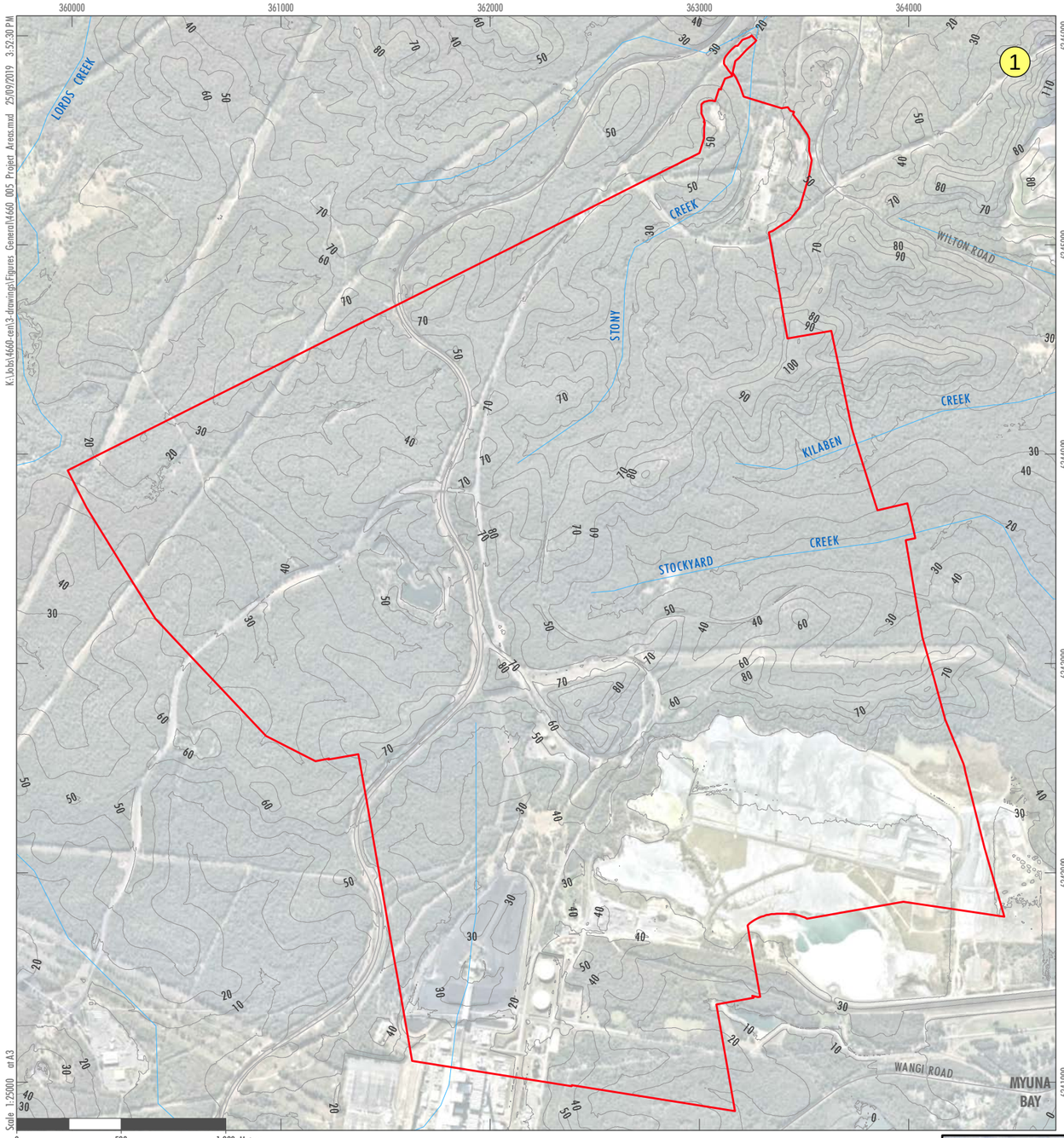
Name of Authorised Person: _____

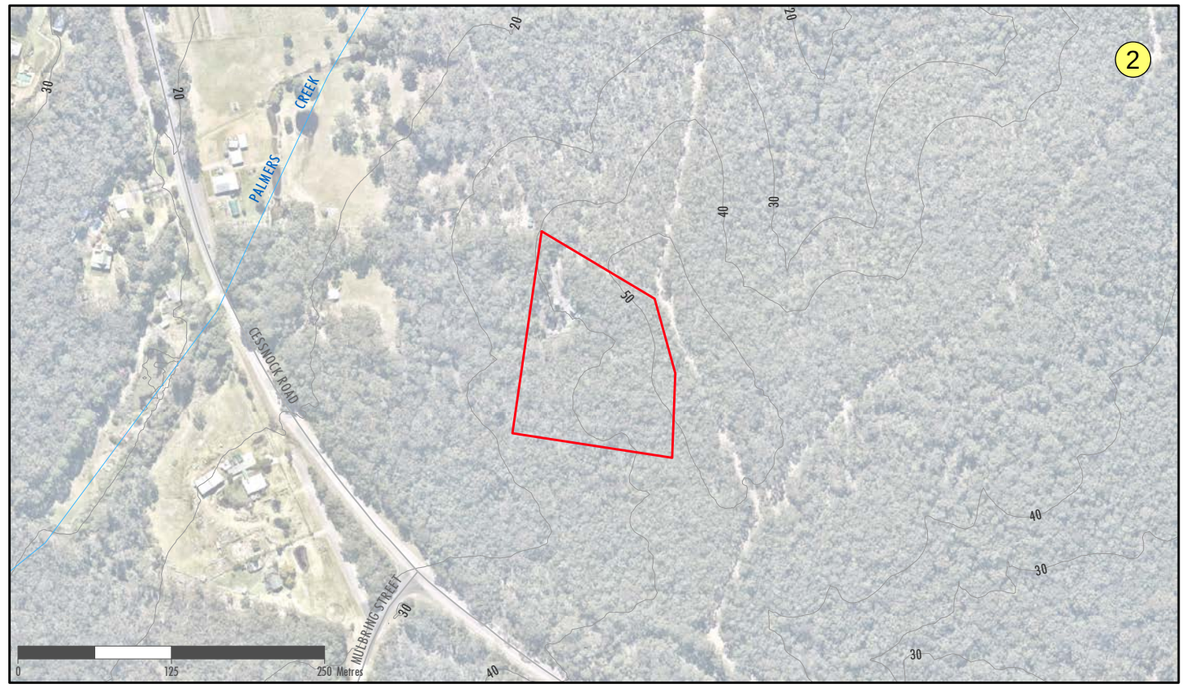
Signature: _____

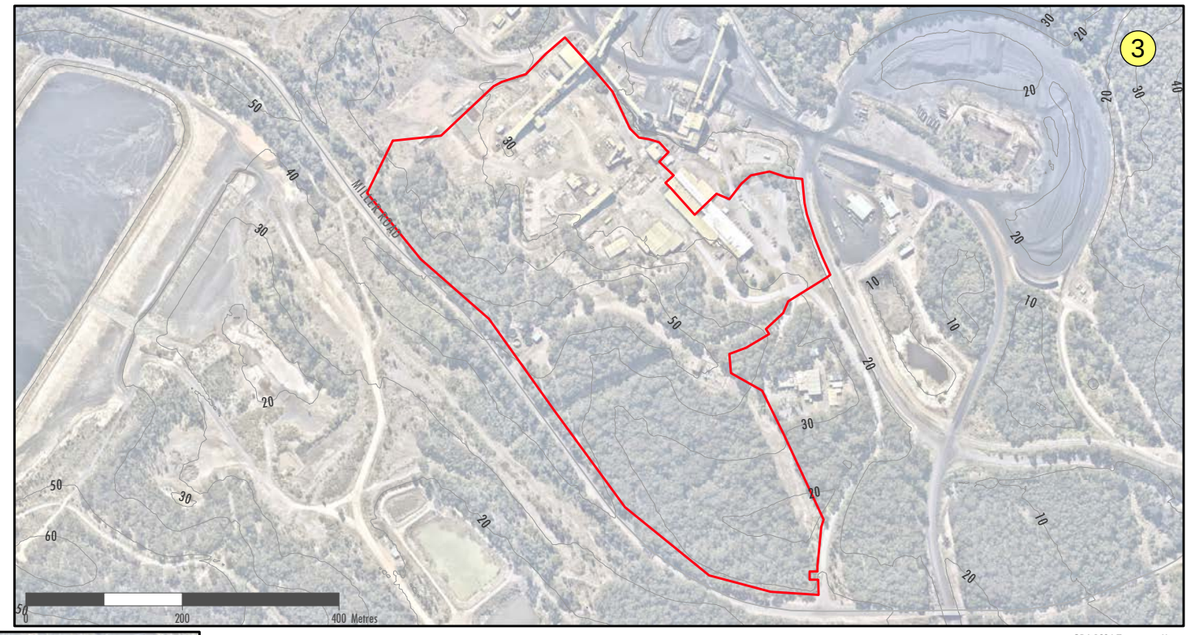
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umwelt







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Legend

Project Assessment Area

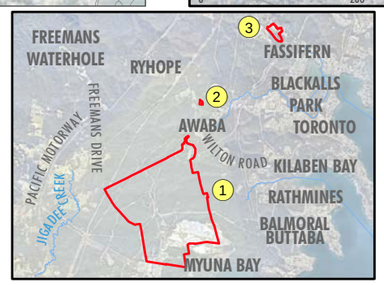


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

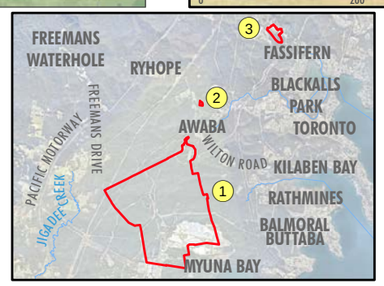
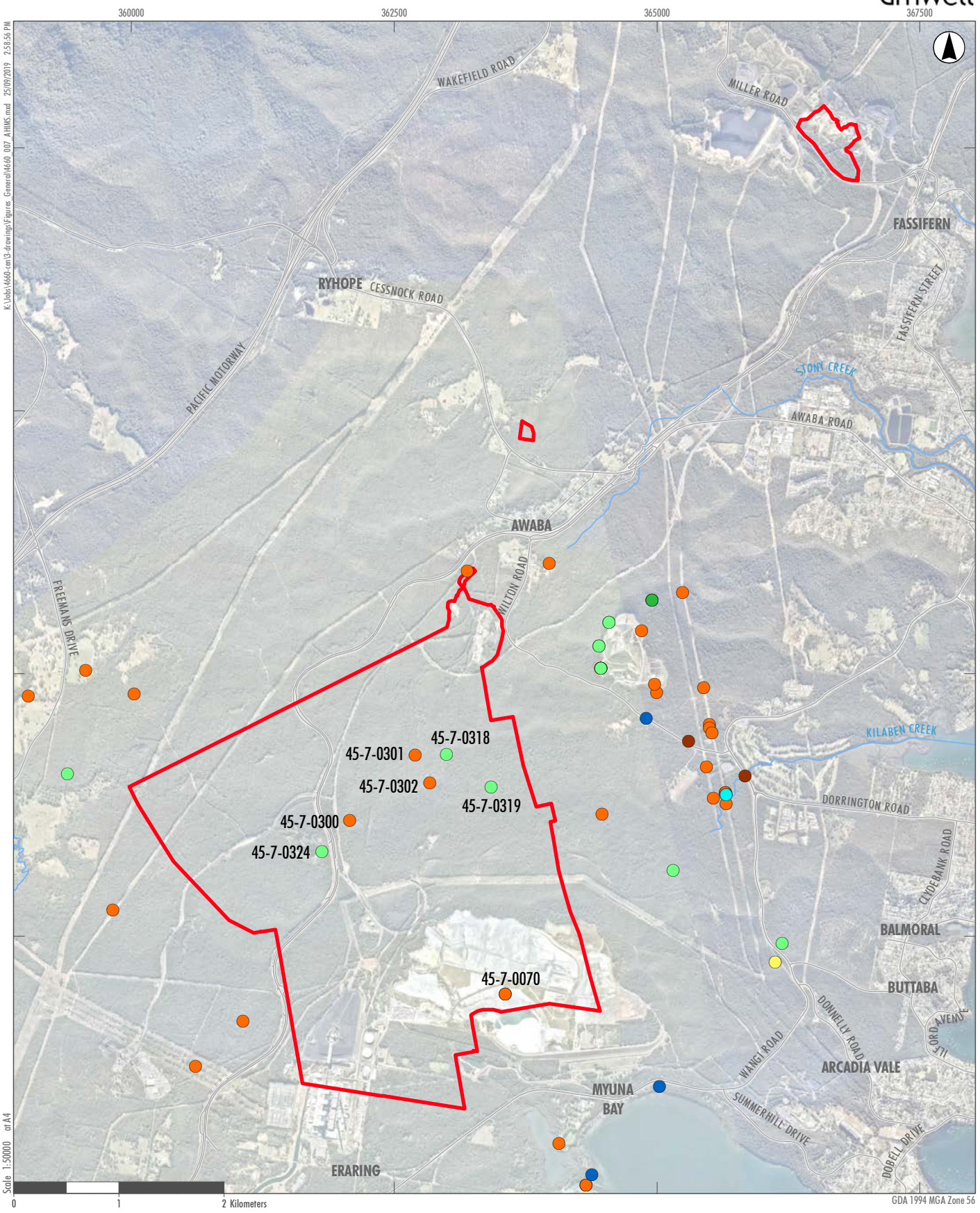


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



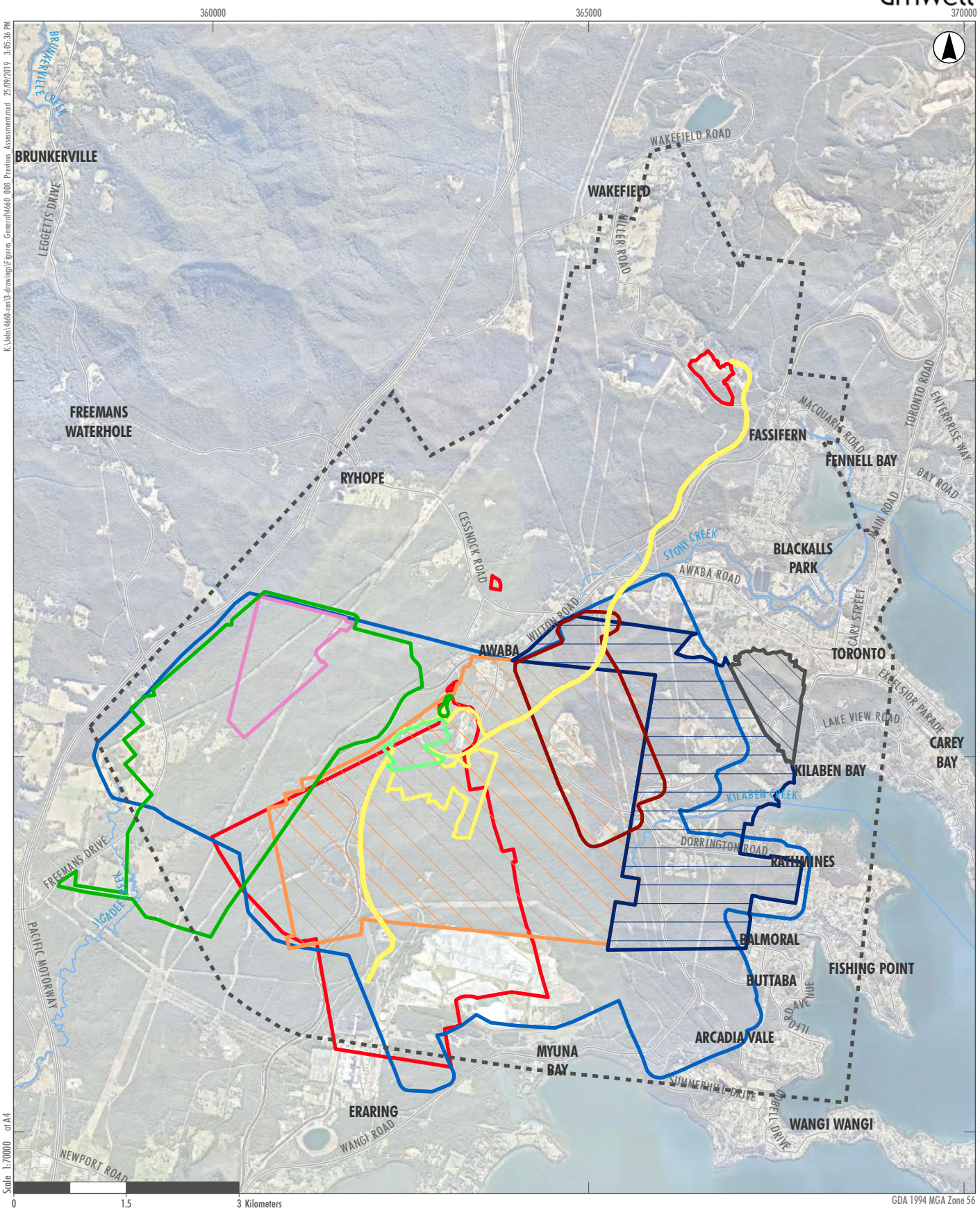
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



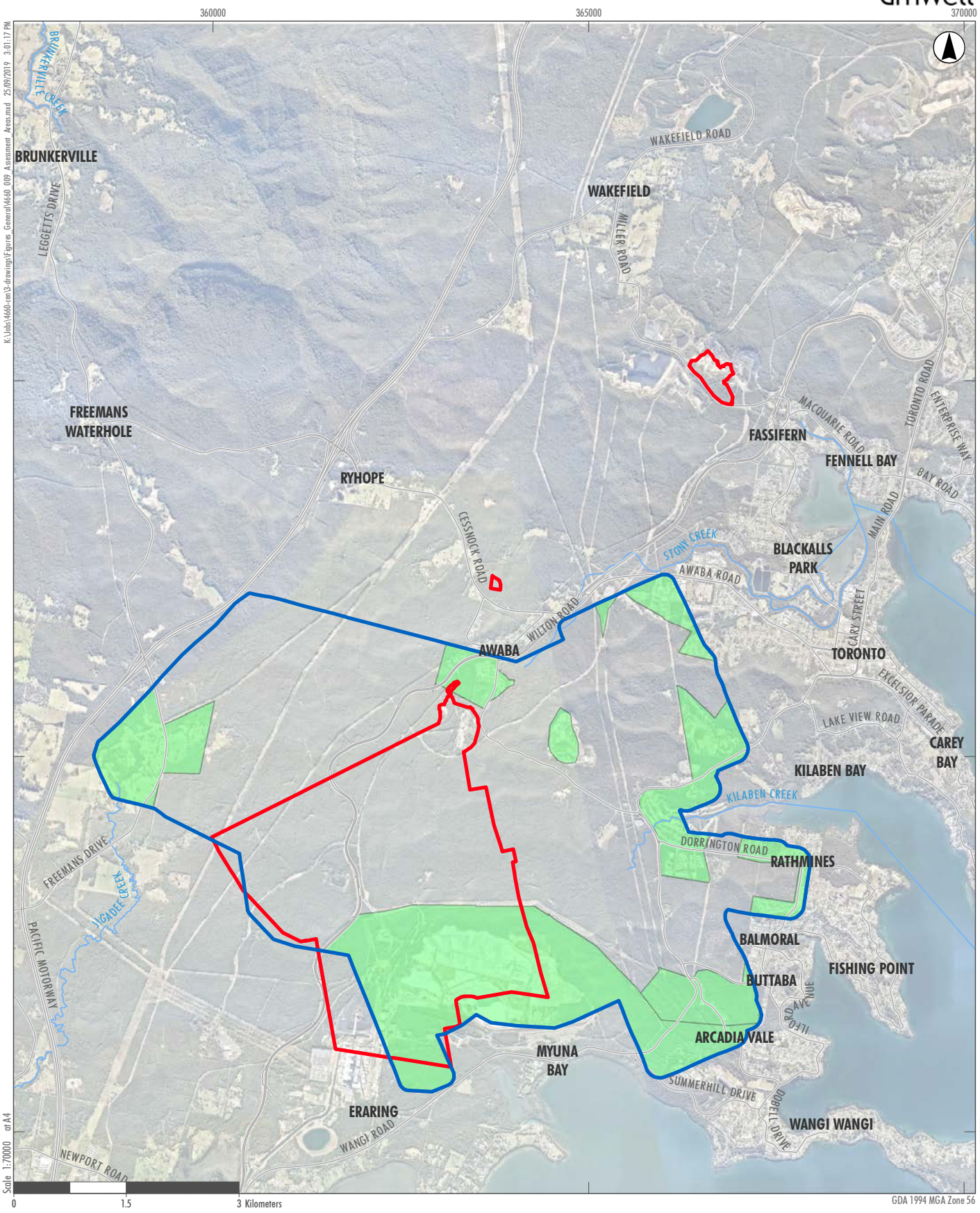
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Kawul Pty Ltd trading as Wonn1 Sites
Arthur Fletcher
619 Main Road
GLENDALE NSW 2285

Wonn1sites@gmail.com

Dear Arthur Fletcher

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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Umwelt (Australia) Pty Limited
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1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

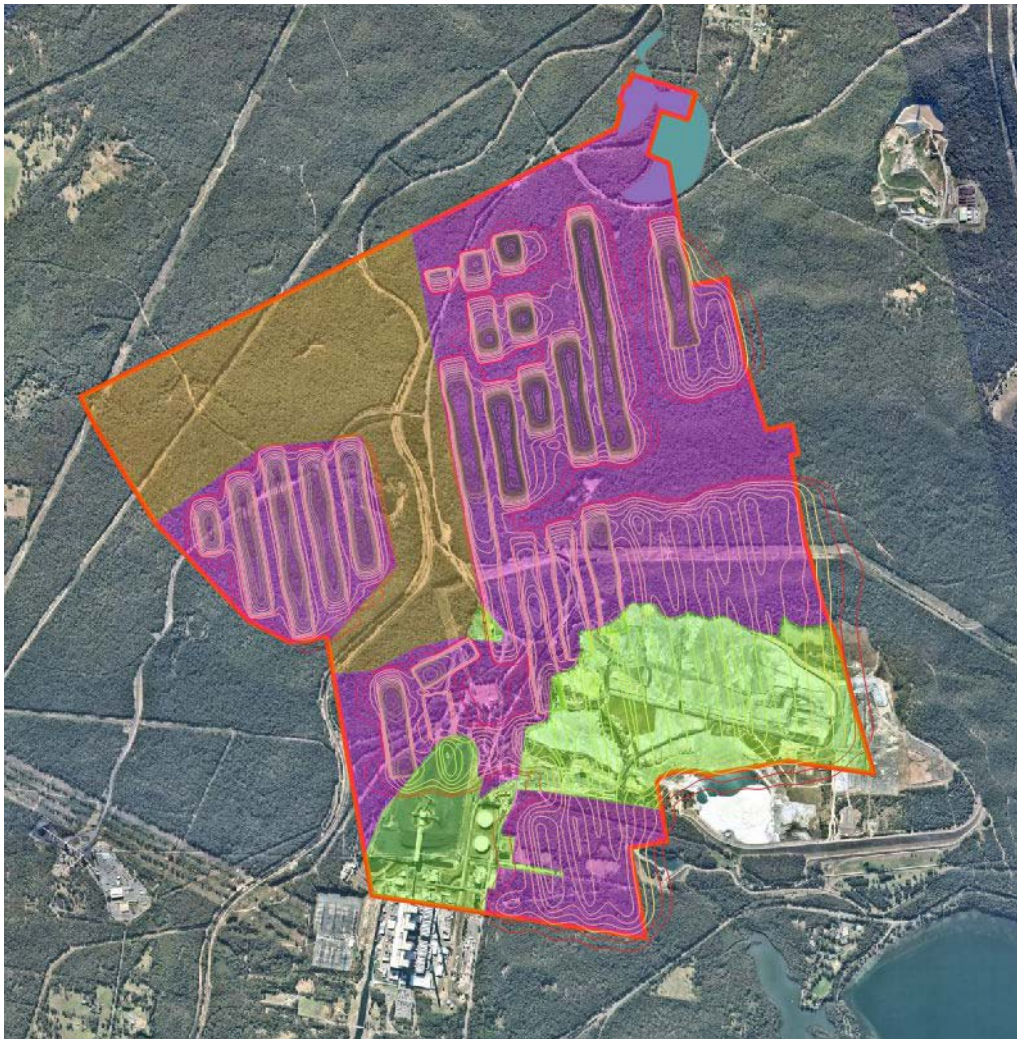


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

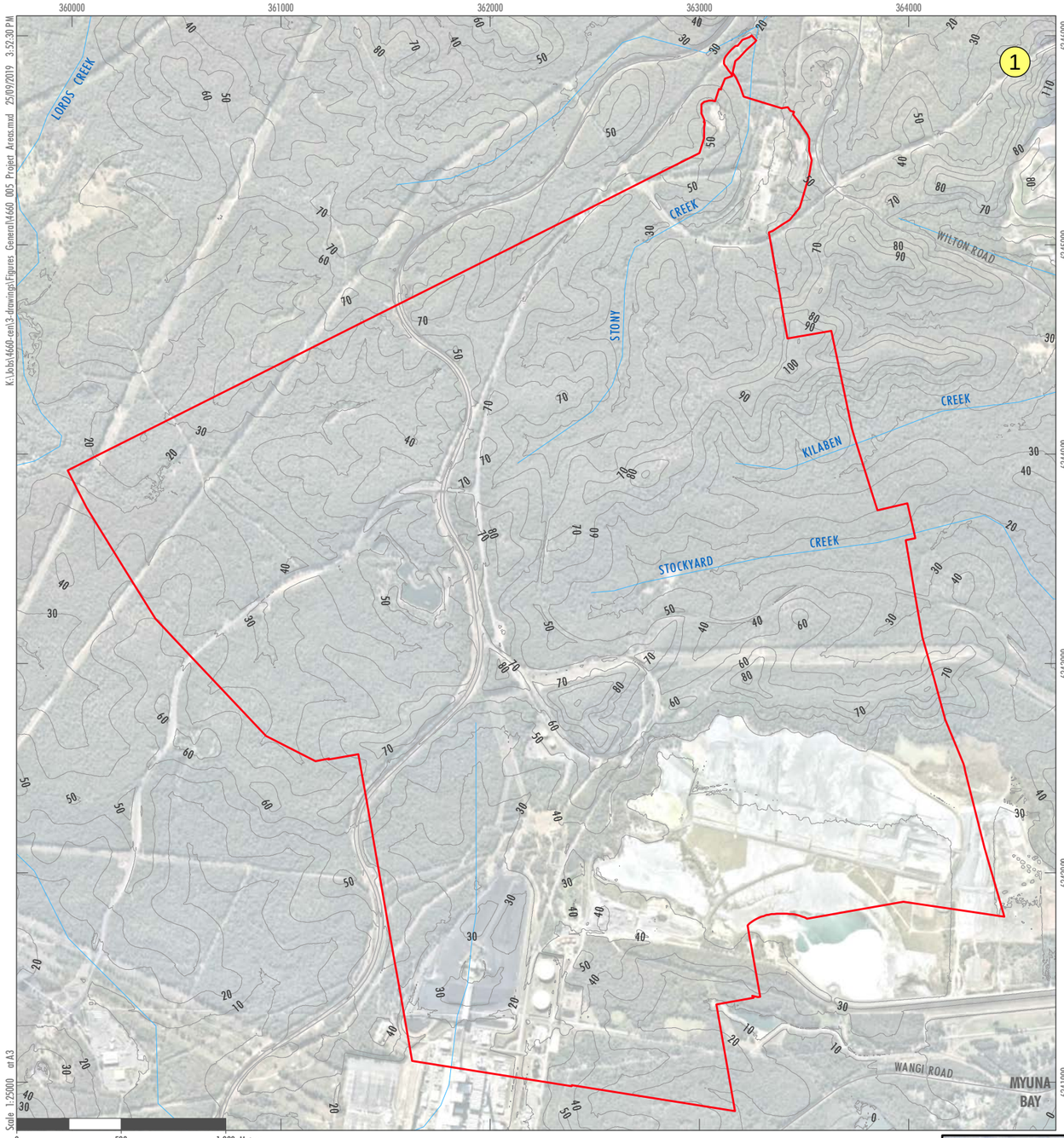
Name of Authorised Person: _____

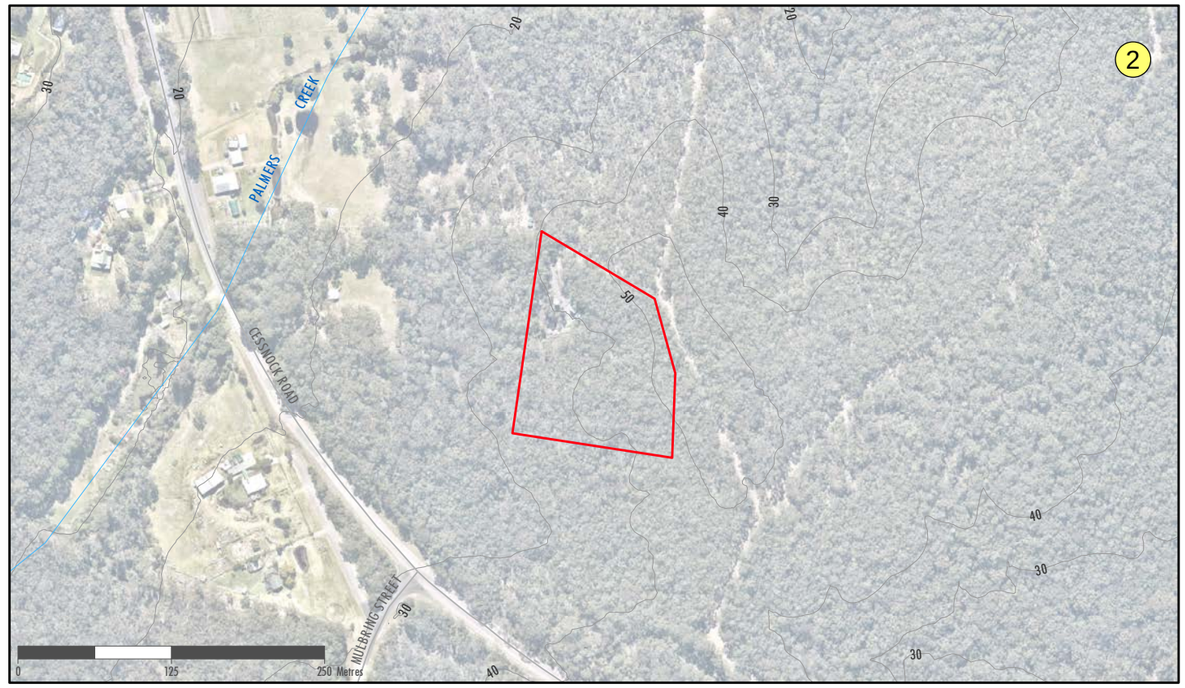
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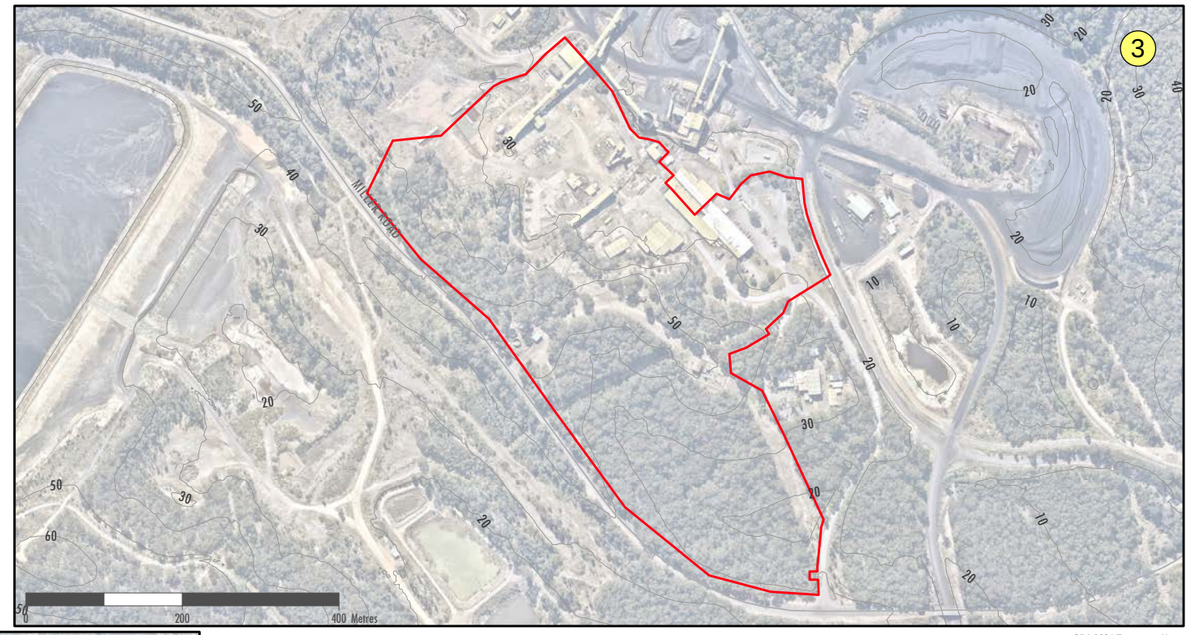
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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

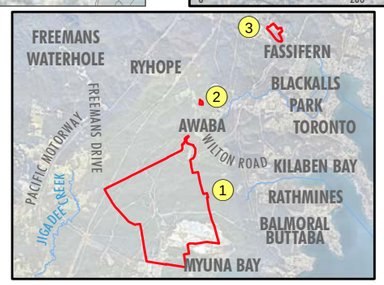


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

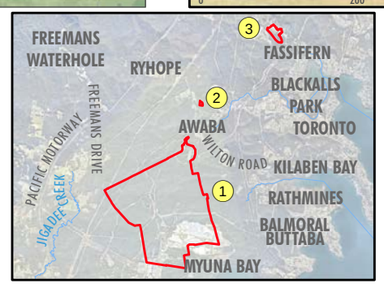
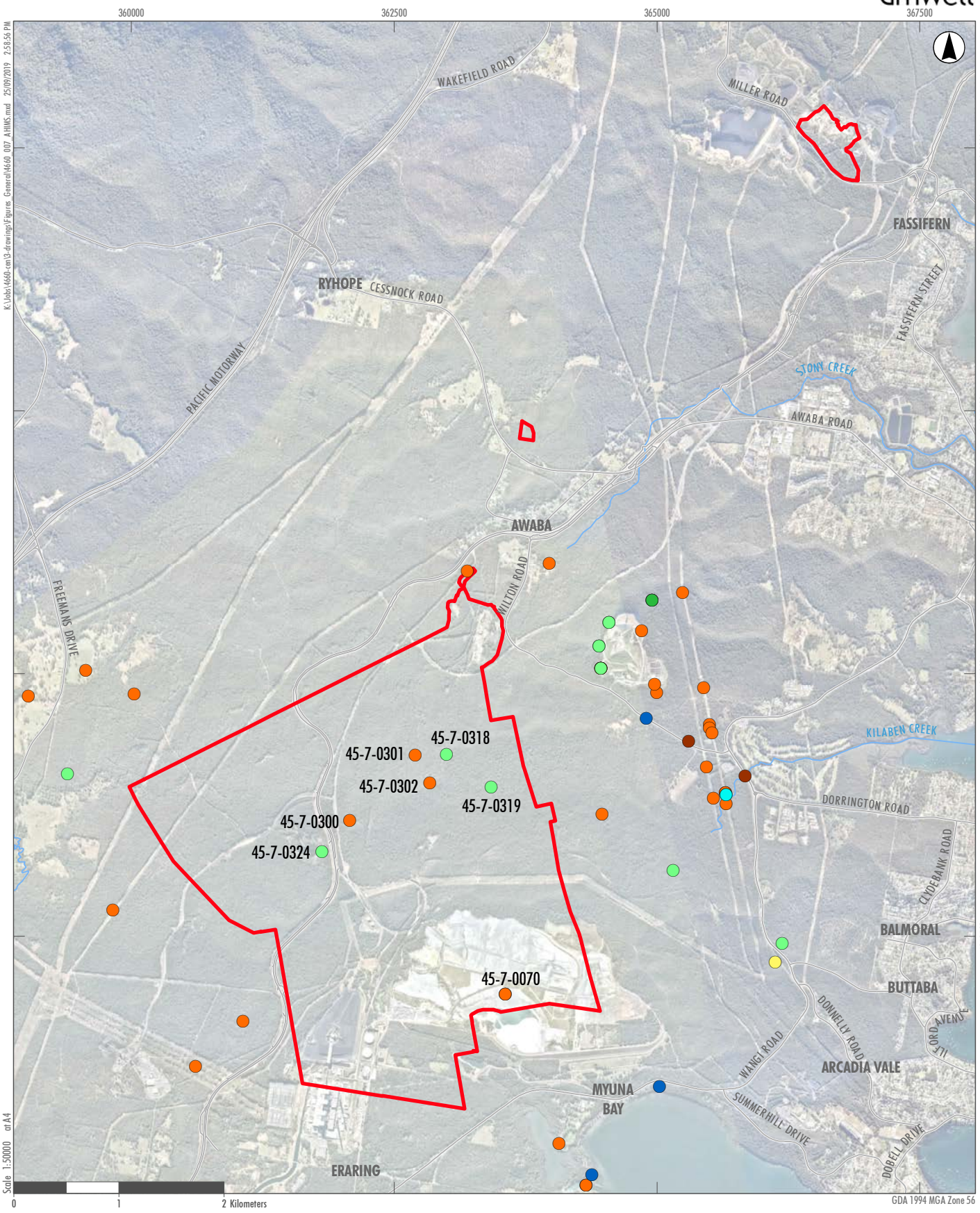


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



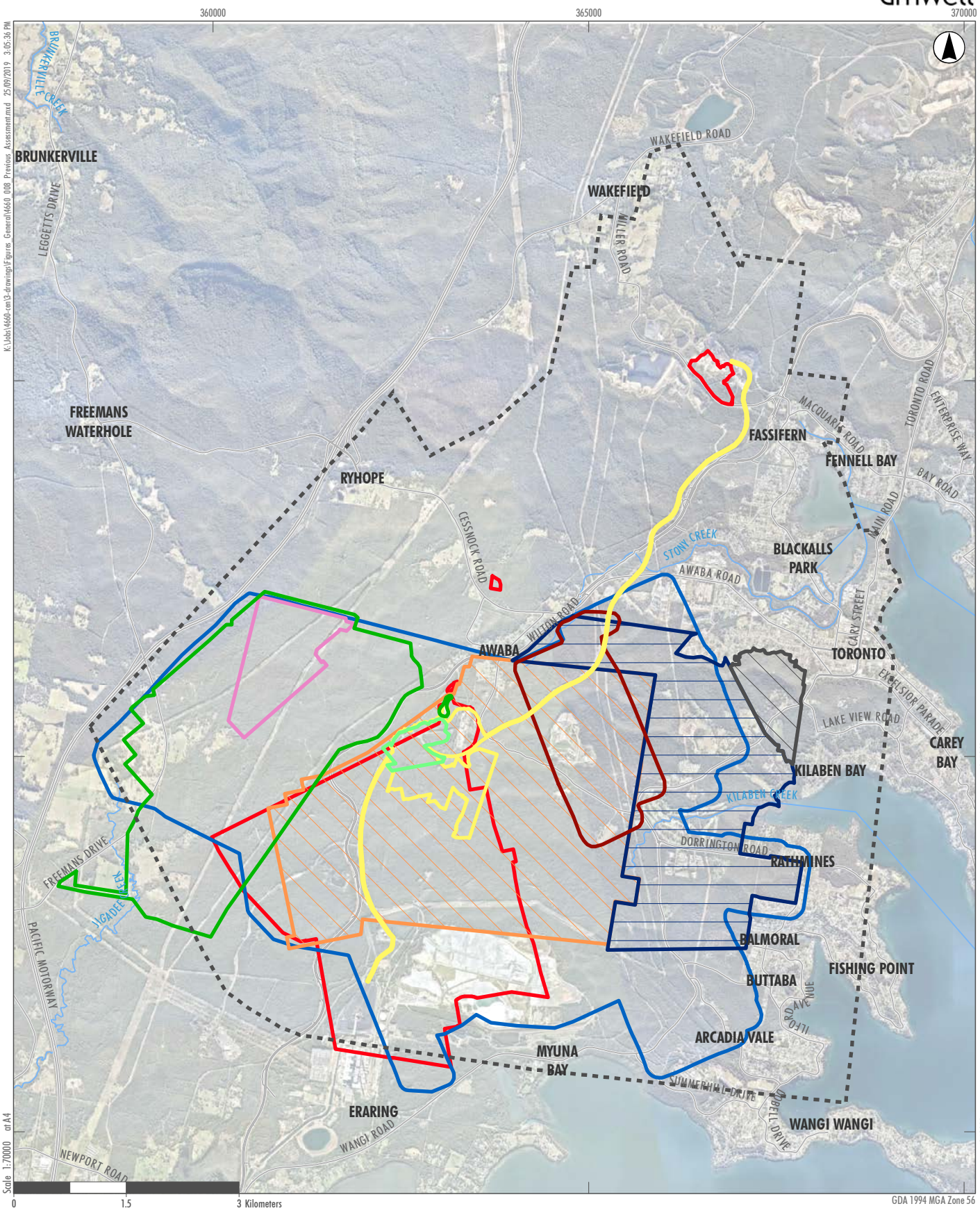
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



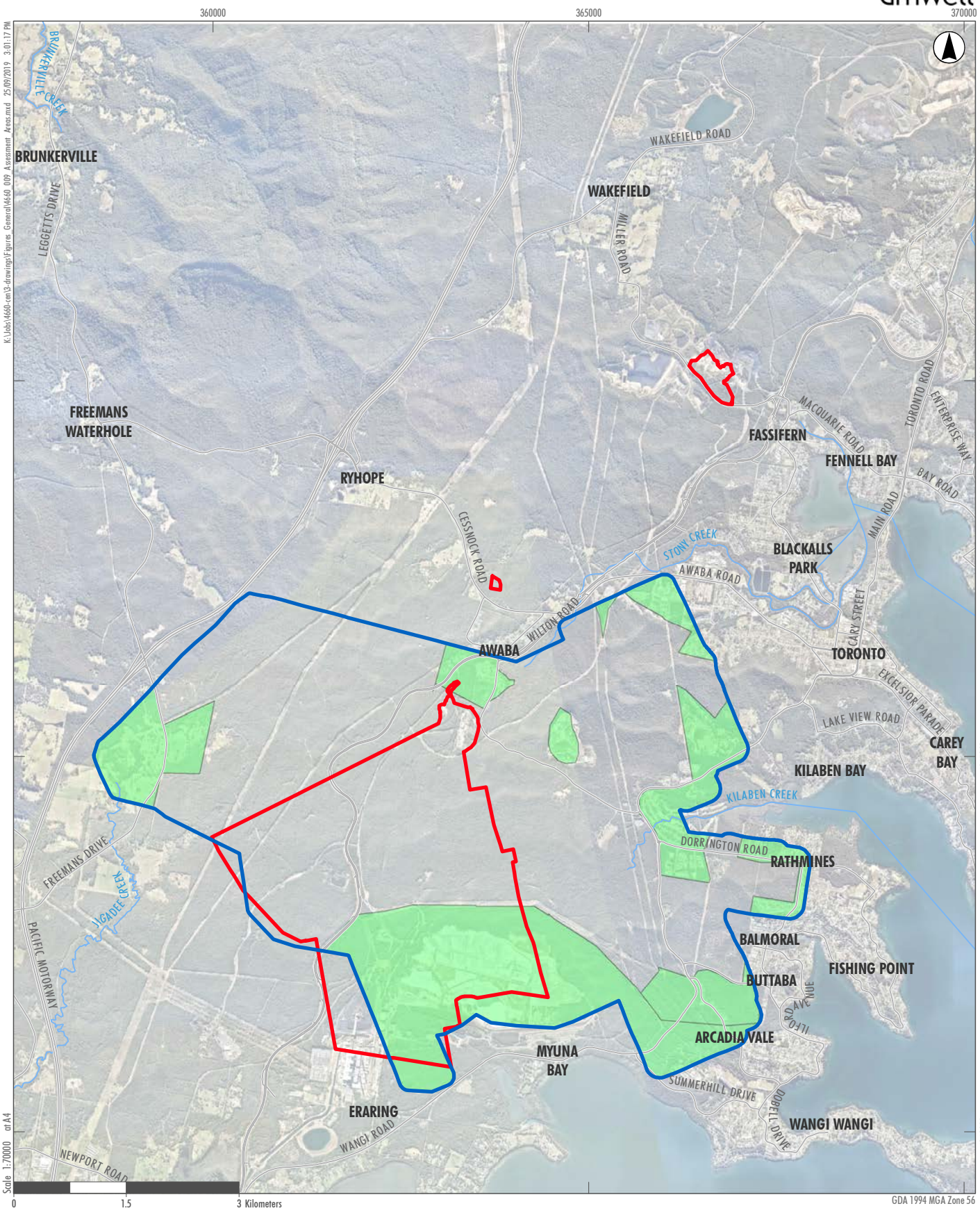
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Awabakal & Guringai Pty Ltd
Kerrie Brauer, Tracey Howie, Trudy Smith

kerrie@awabakal.com.au
tracey@guringai.com.au

Dear Kerrie Brauer, Tracey Howie, Trudy Smith

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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ABN: 18 059 519 041

1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

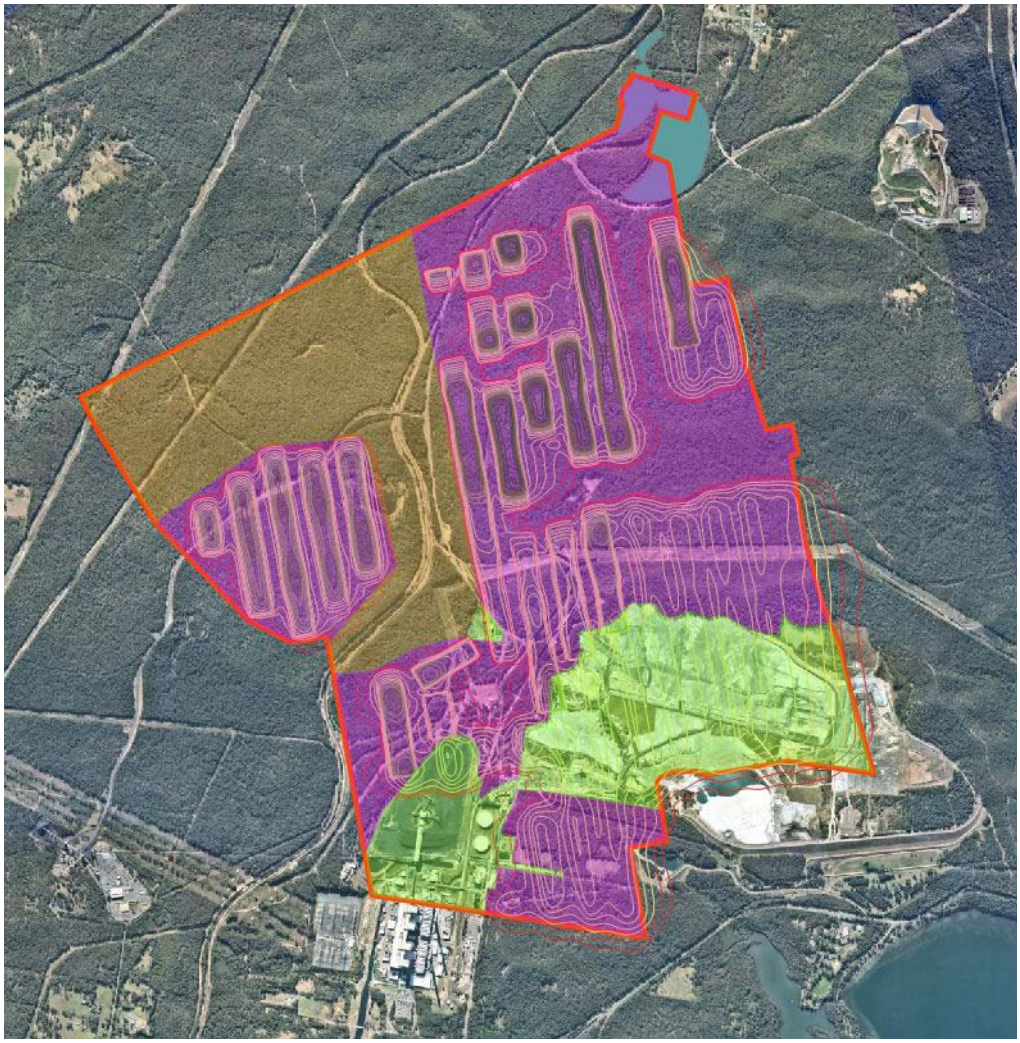


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

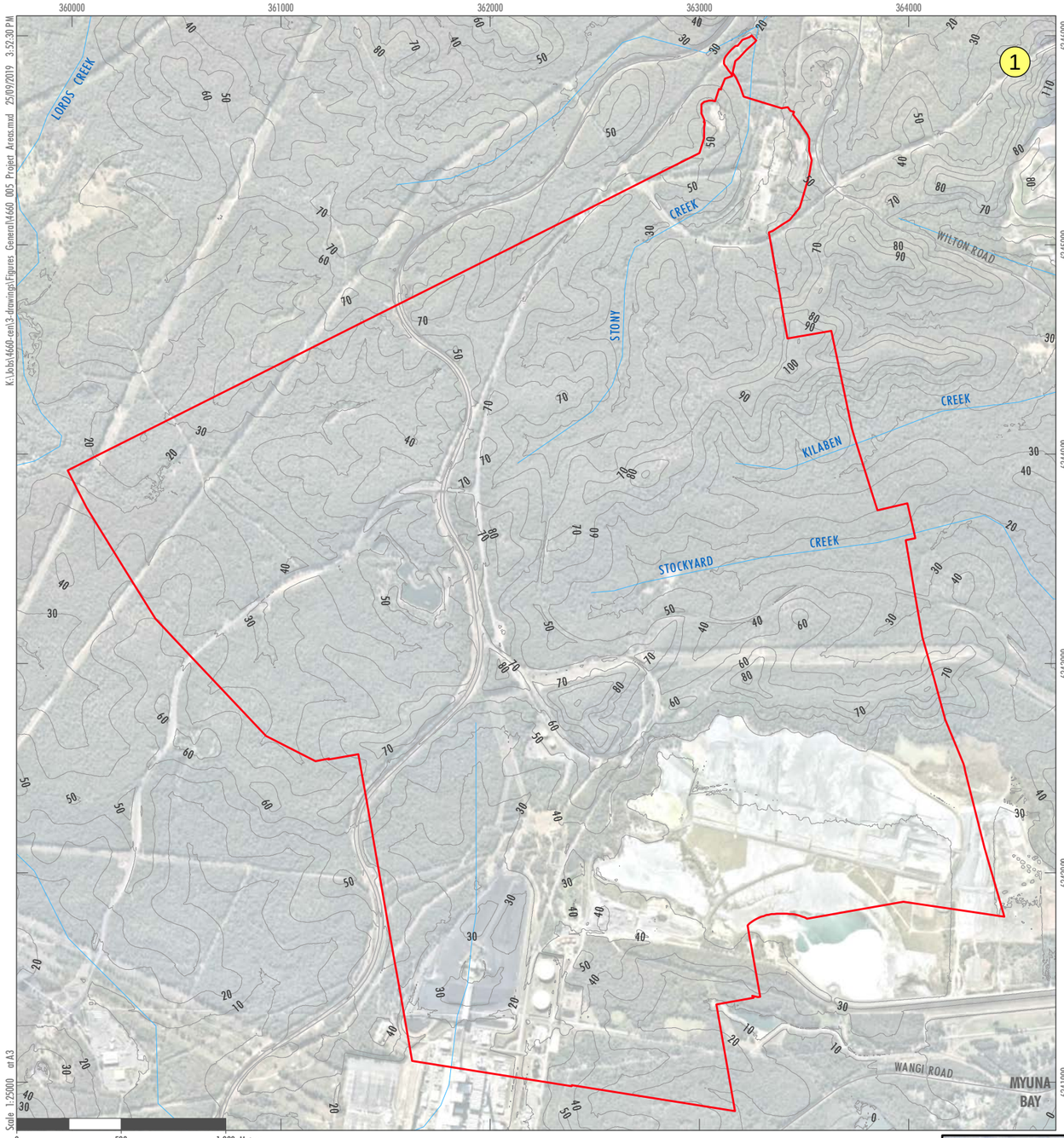
Name of Authorised Person: _____

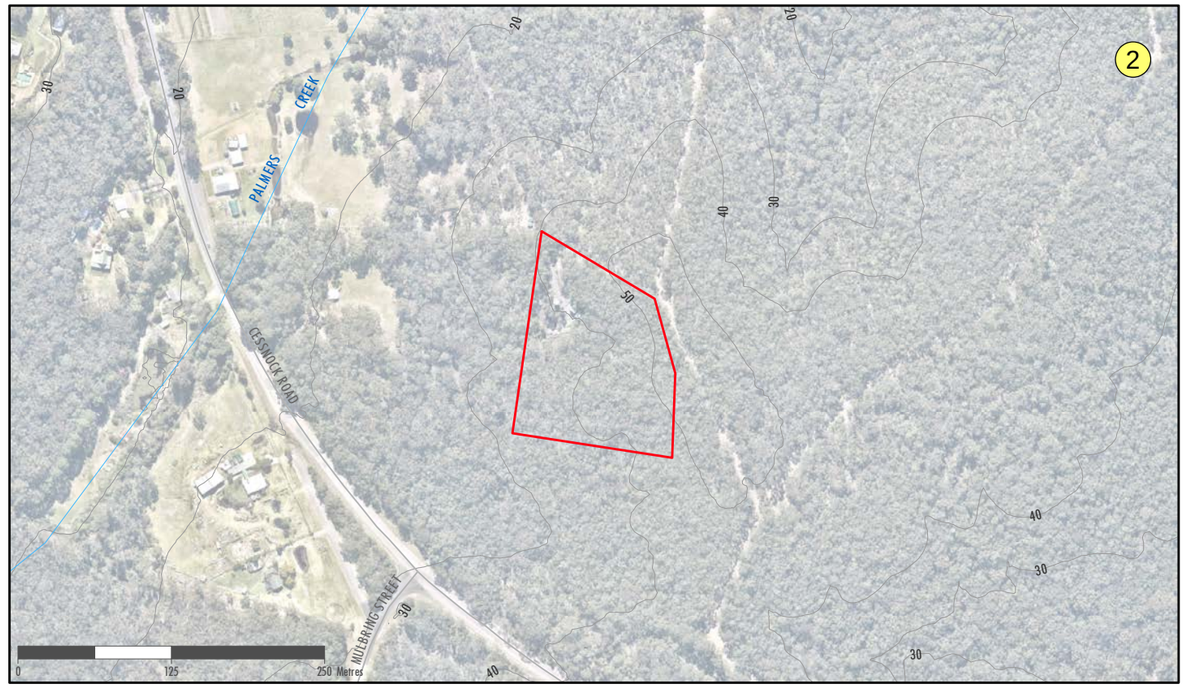
Signature: _____

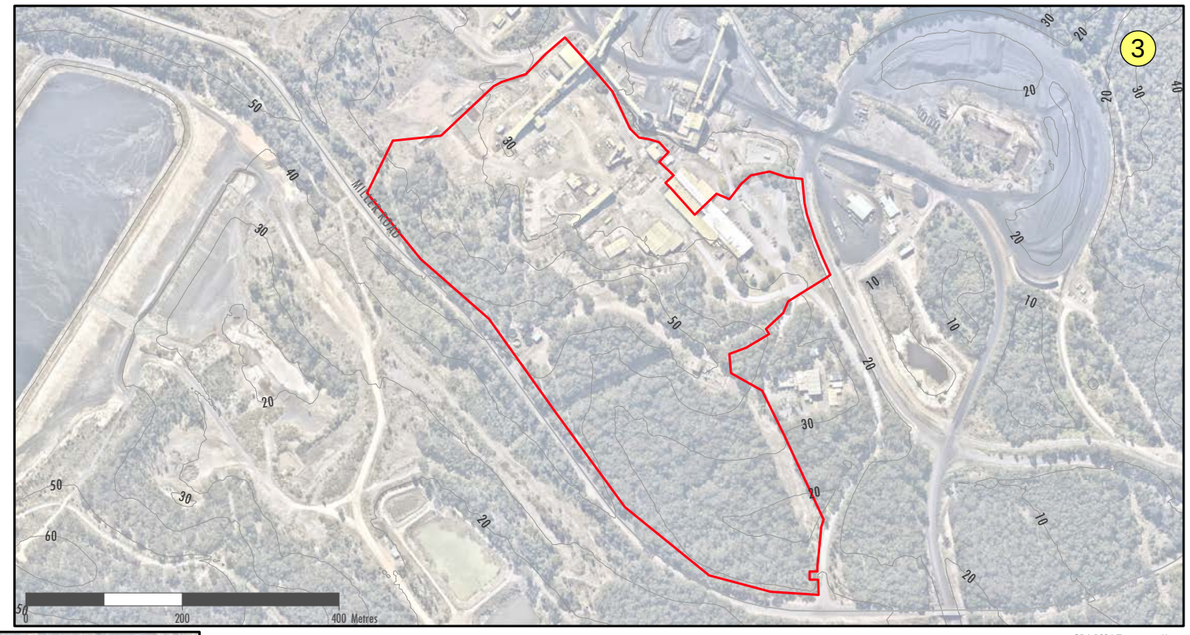
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umwelt







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Legend

Project Assessment Area

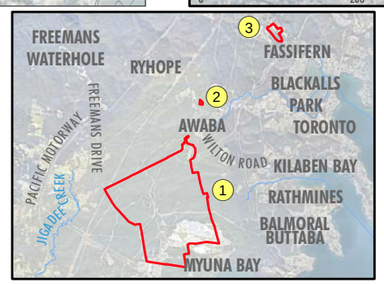


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

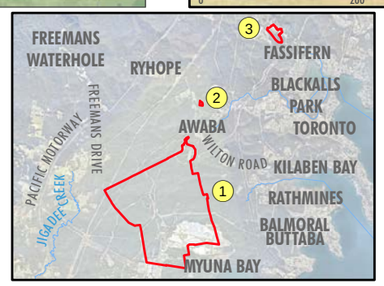
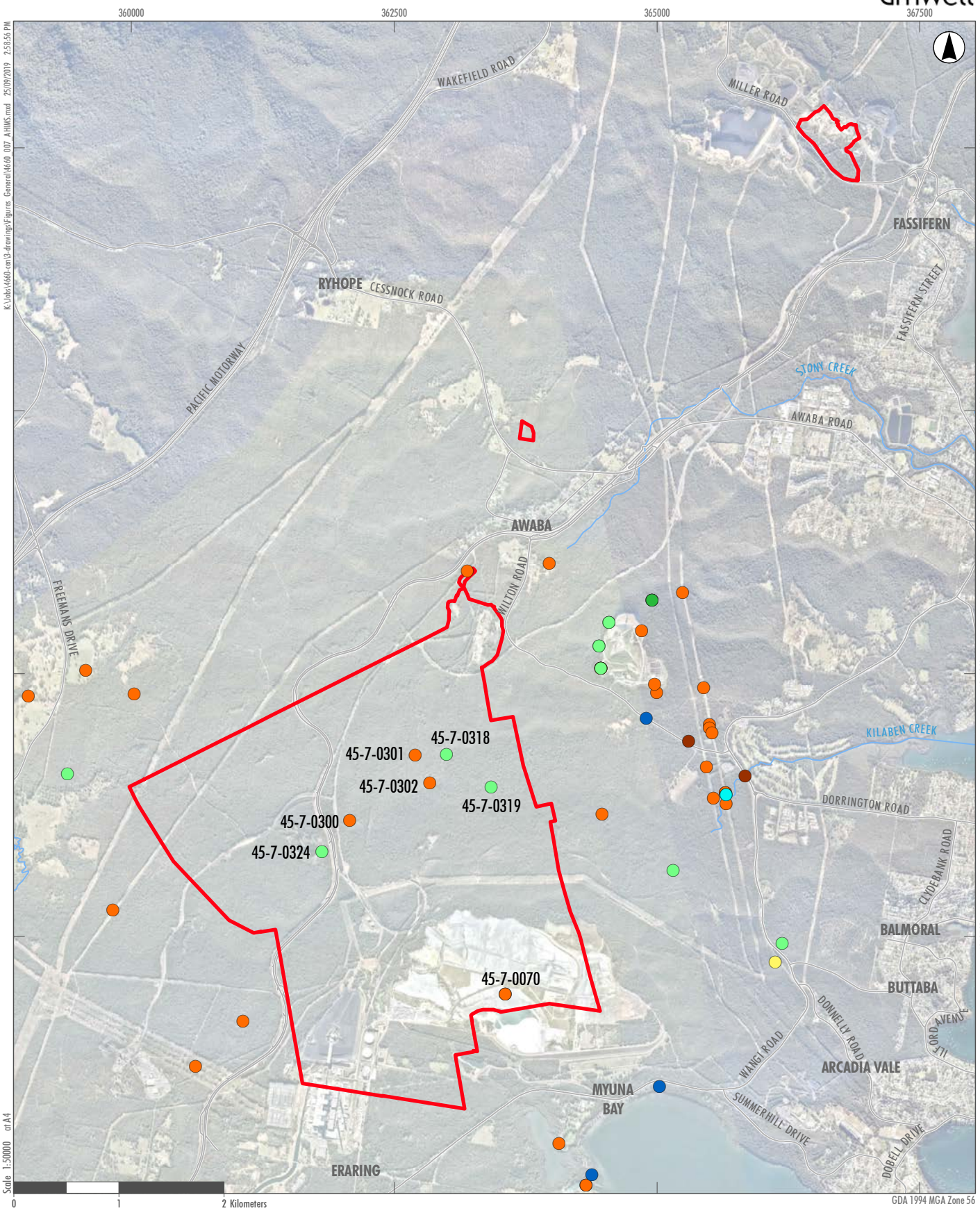


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



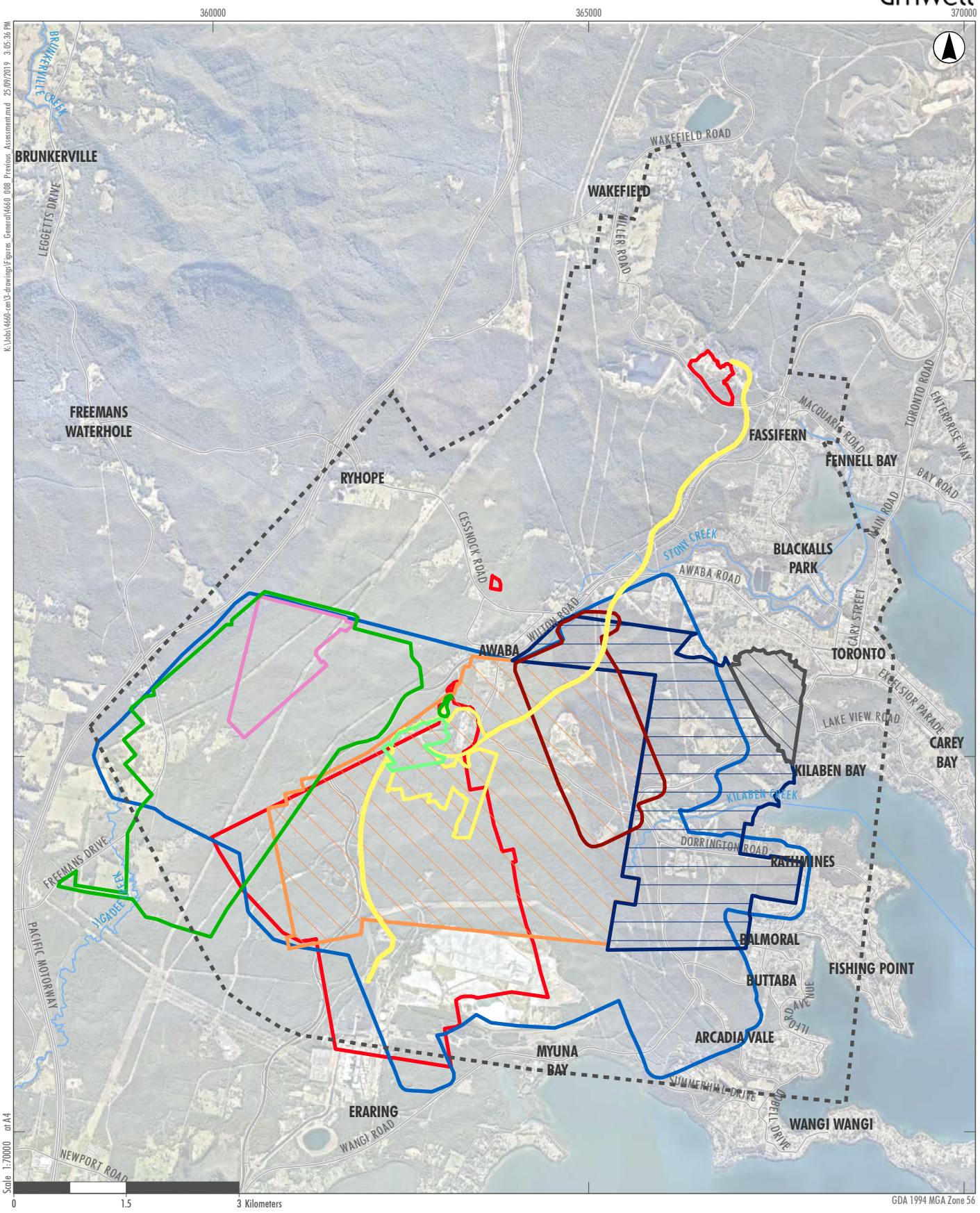
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



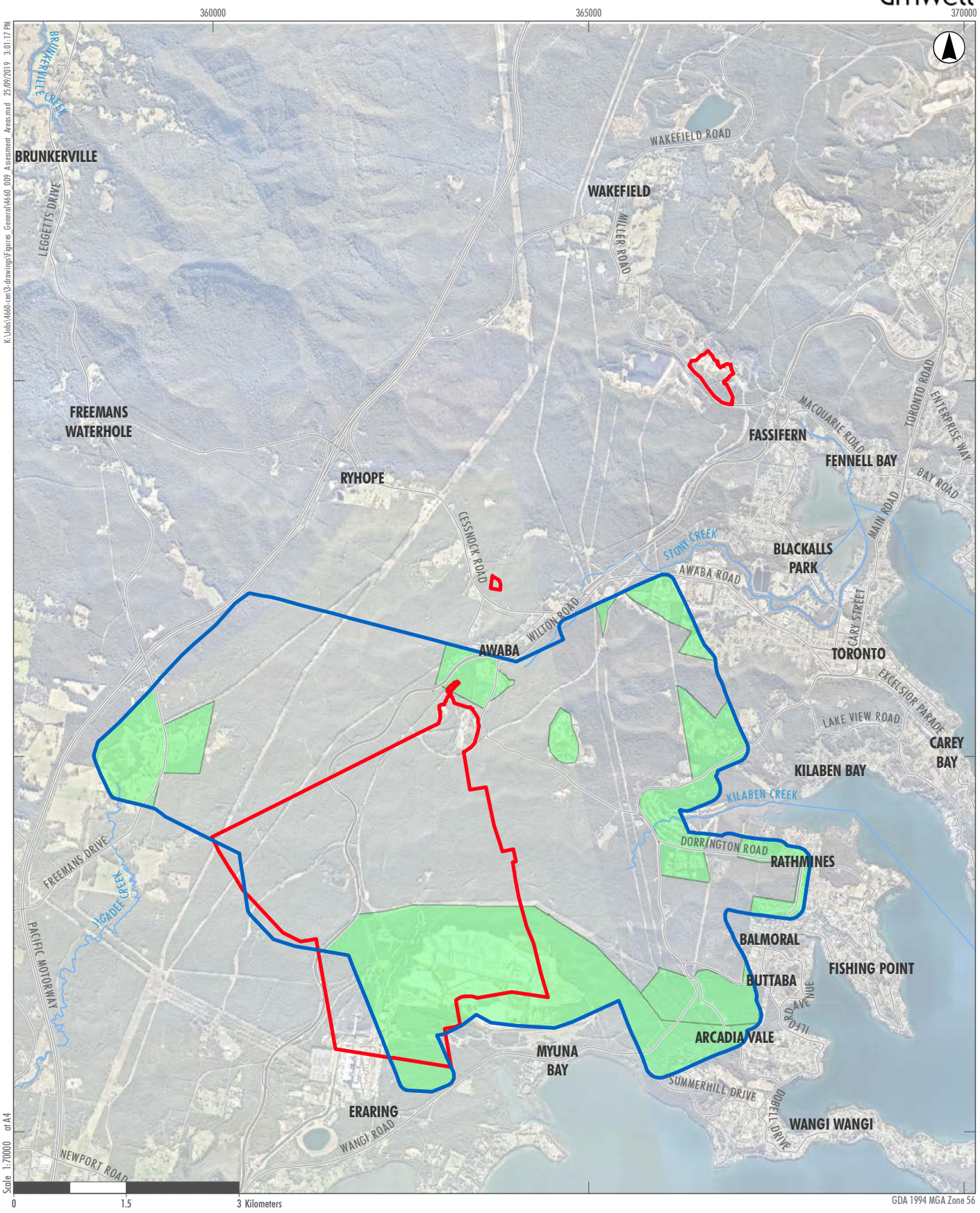
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Deidre Perkins
Deidre Perkins

dedemaree3@hotmail.com

Dear Deidre Perkins

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

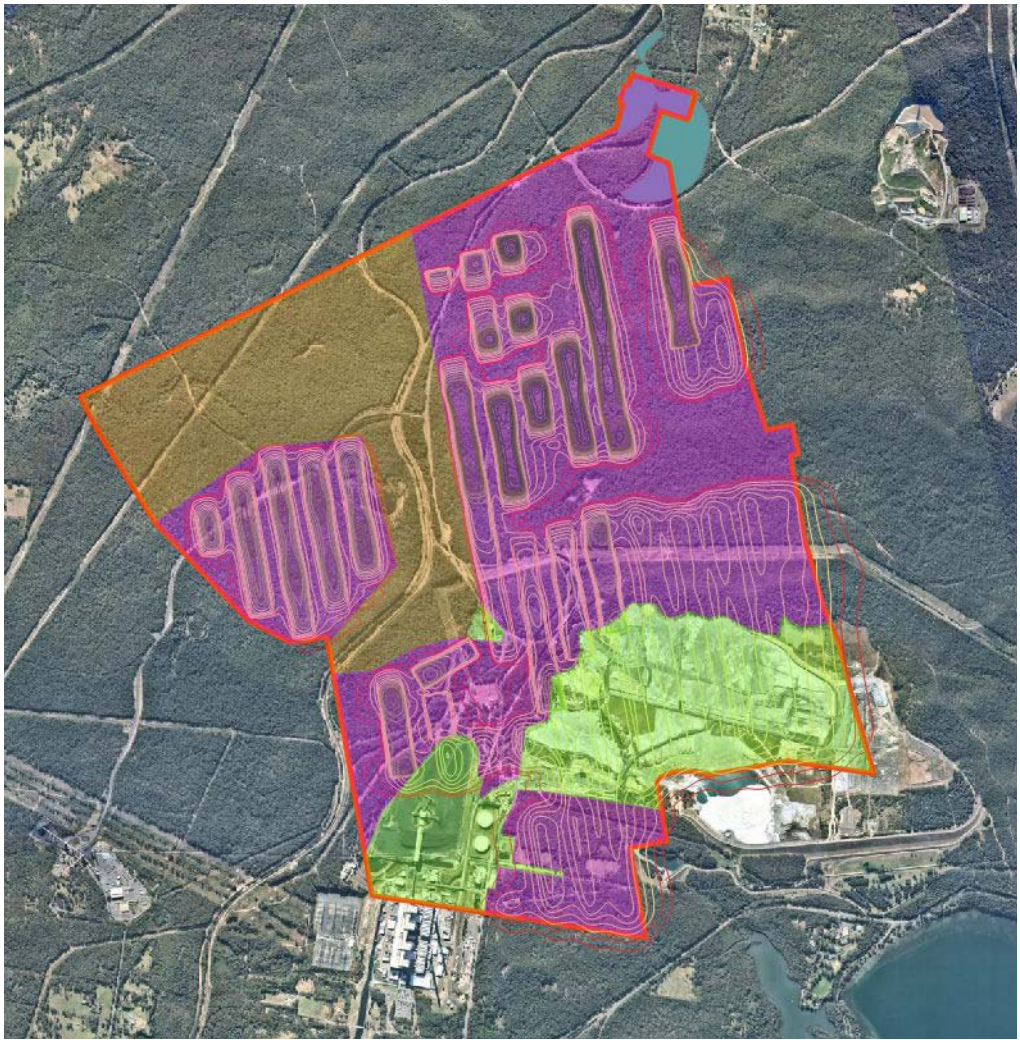


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

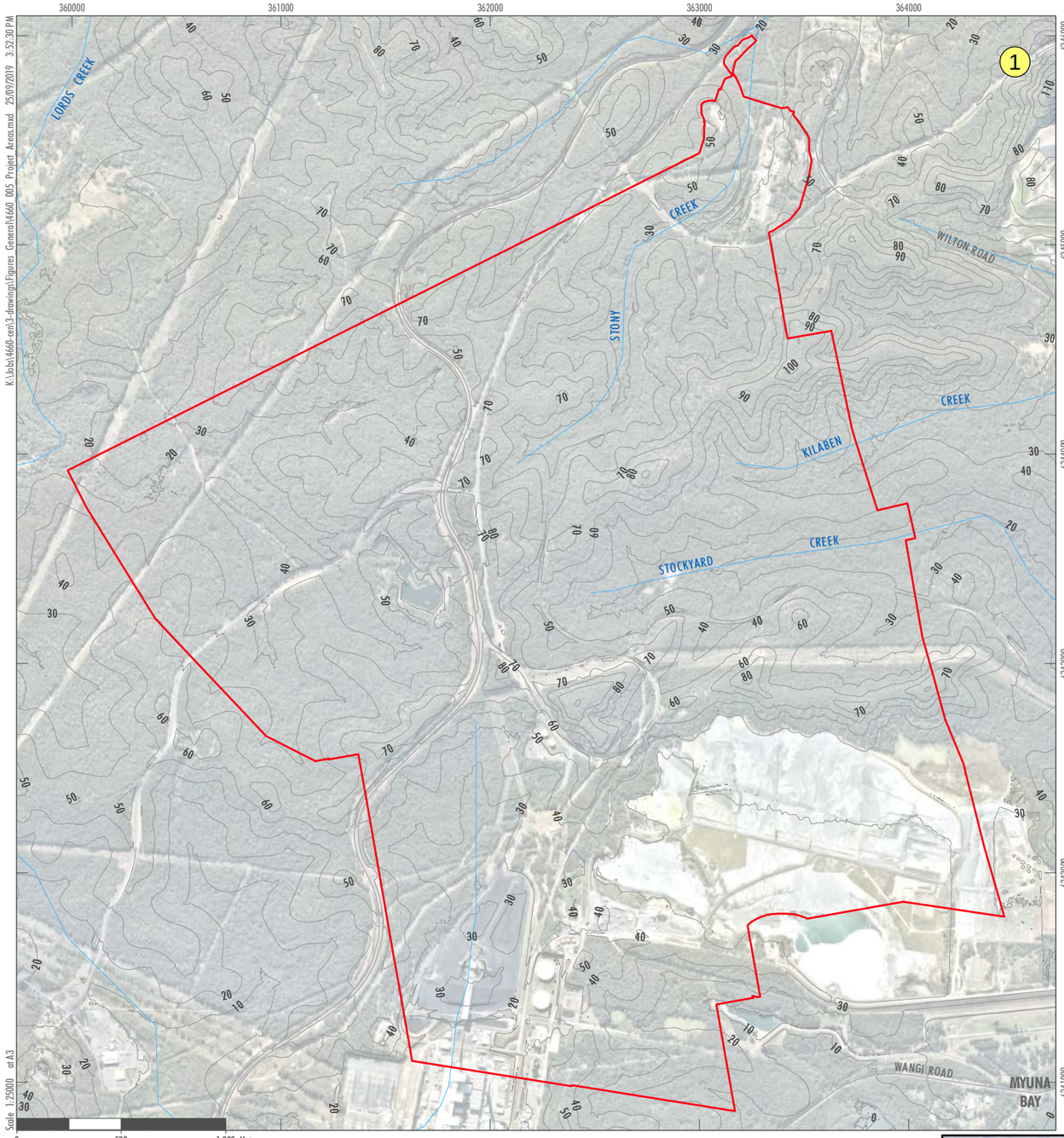
Name of Authorised Person: _____

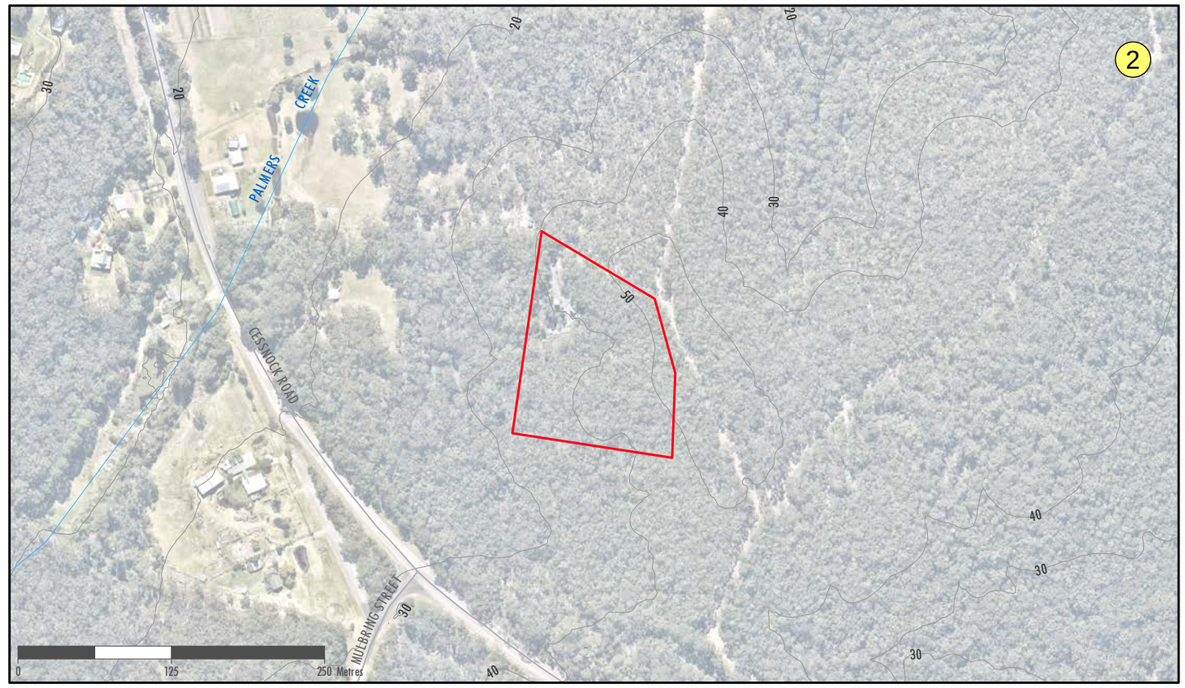
Signature: _____

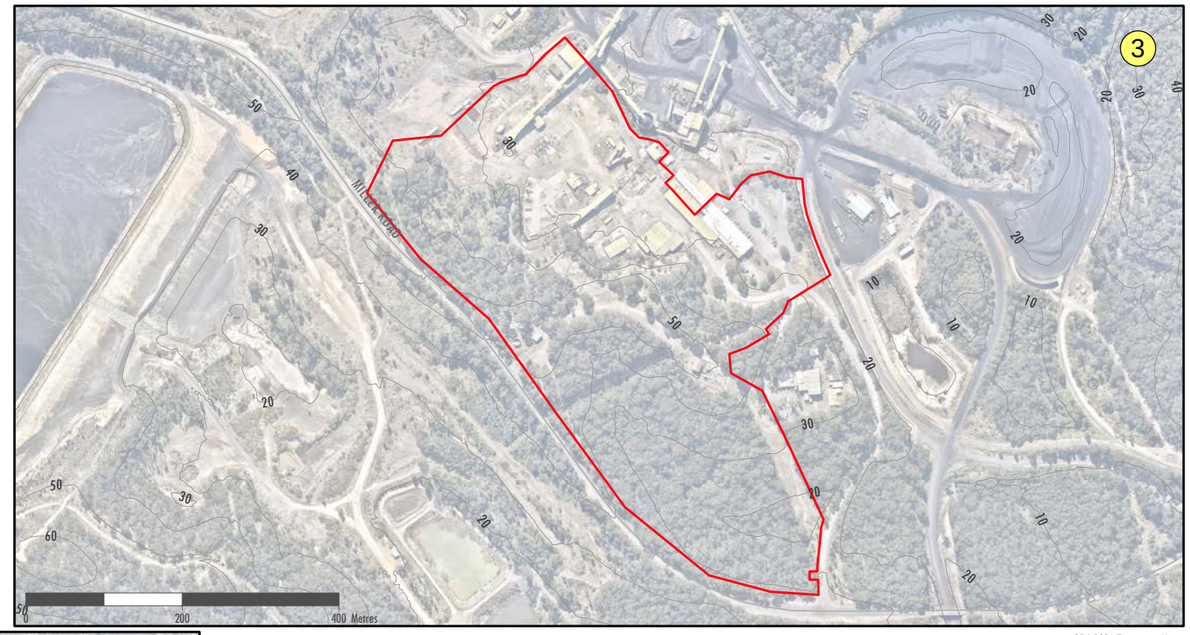
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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

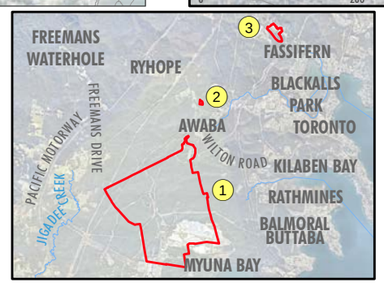


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

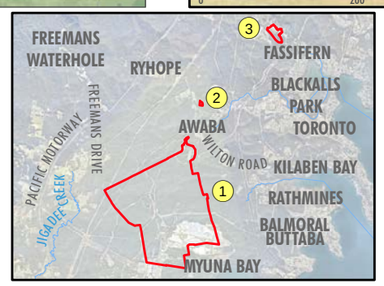
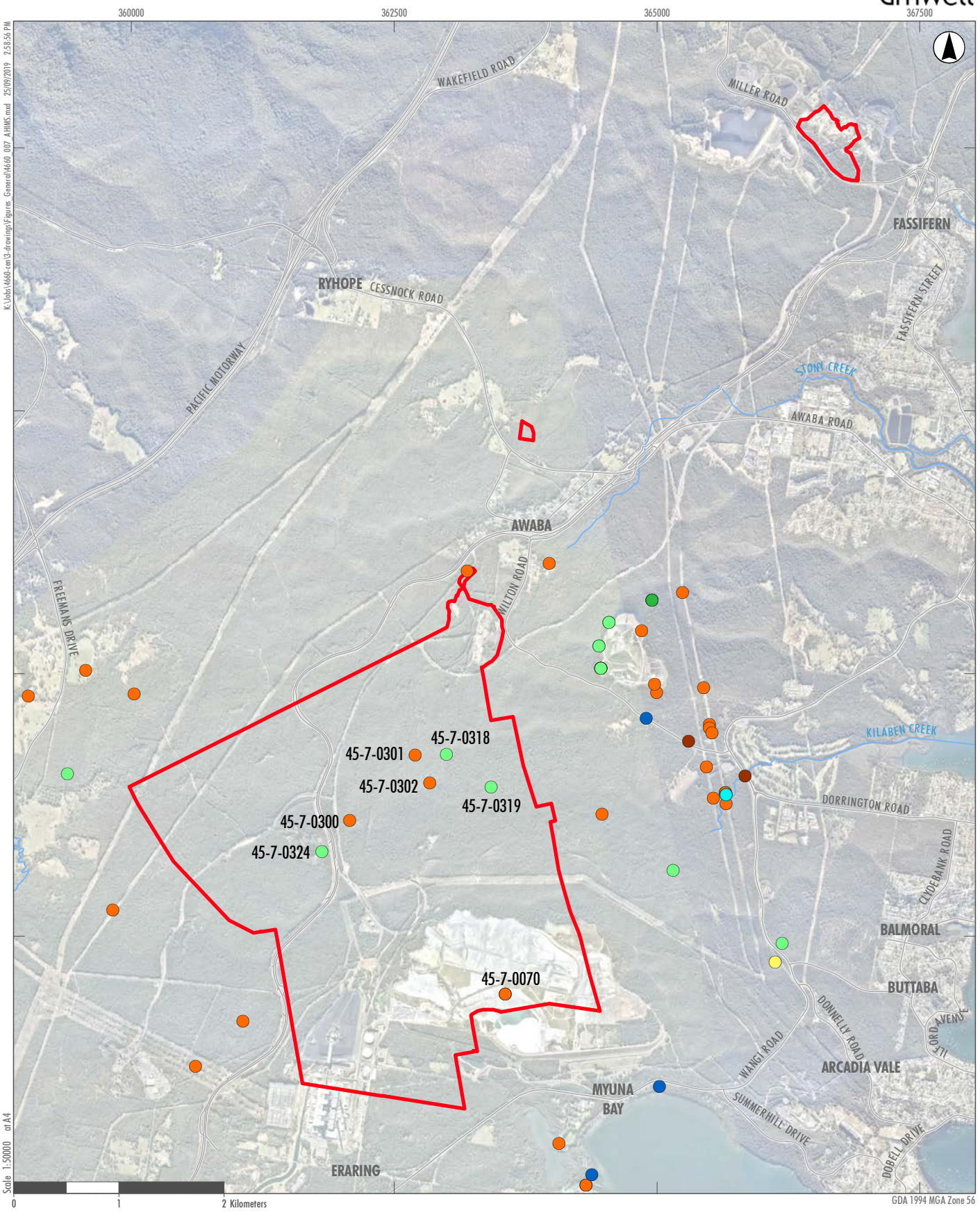


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



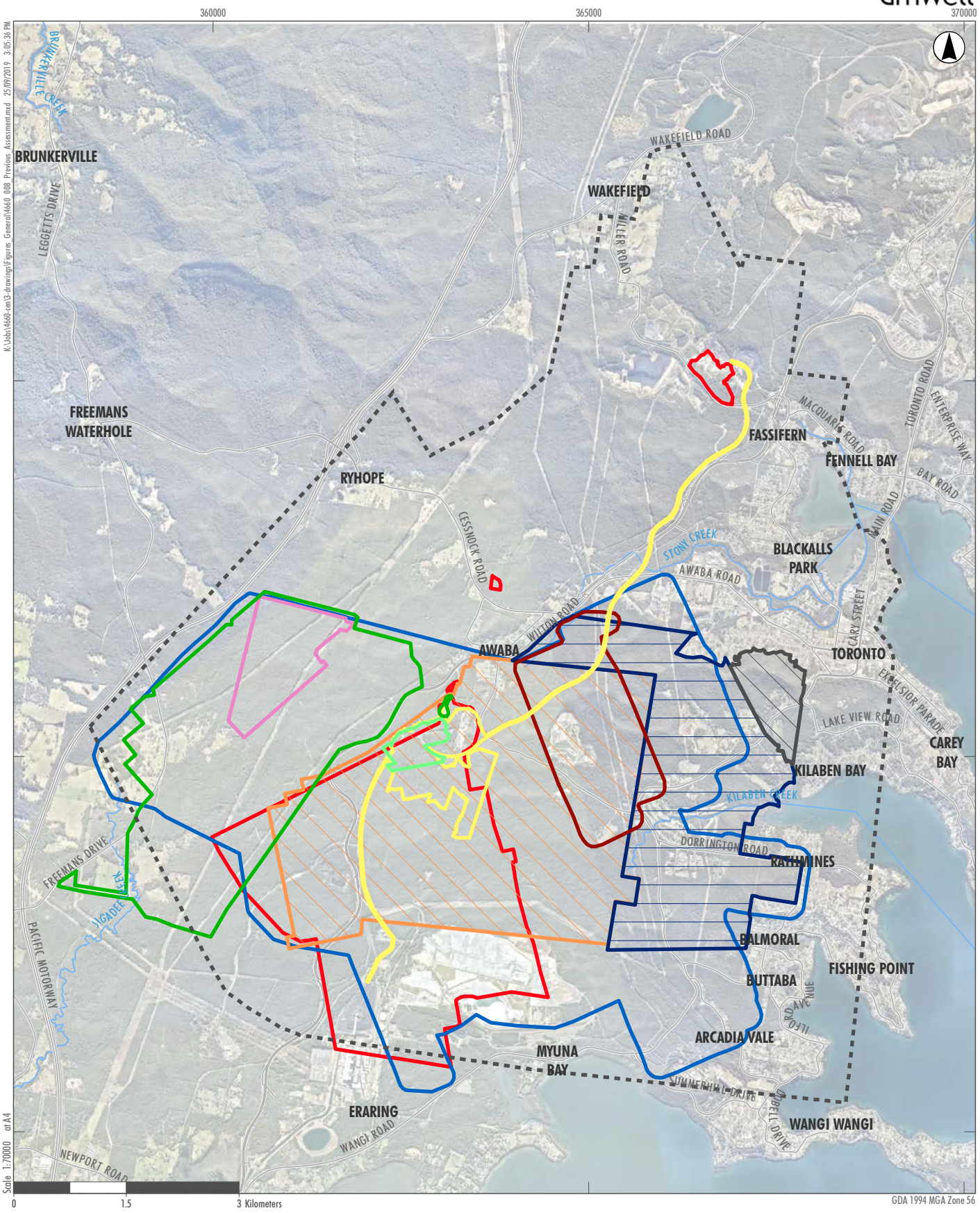
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



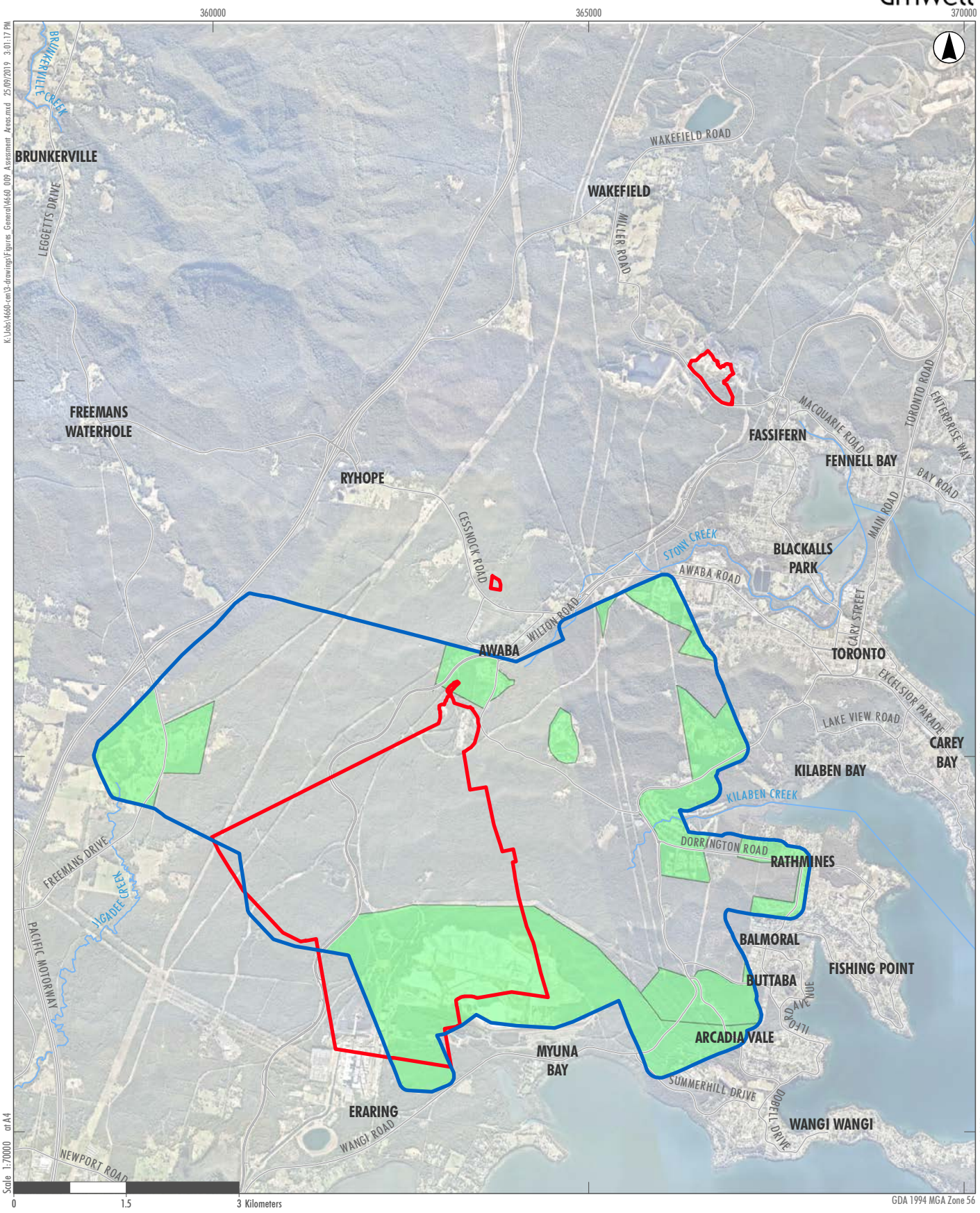
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Murra Bidgee Mullangari Aboriginal Corporation Cultural Heritage
Ryan Johnson
PO Box 246
SURRY HILLS NSW 2147

murrabidgeemullangari@yahoo.com.au

Dear Ryan Johnson

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

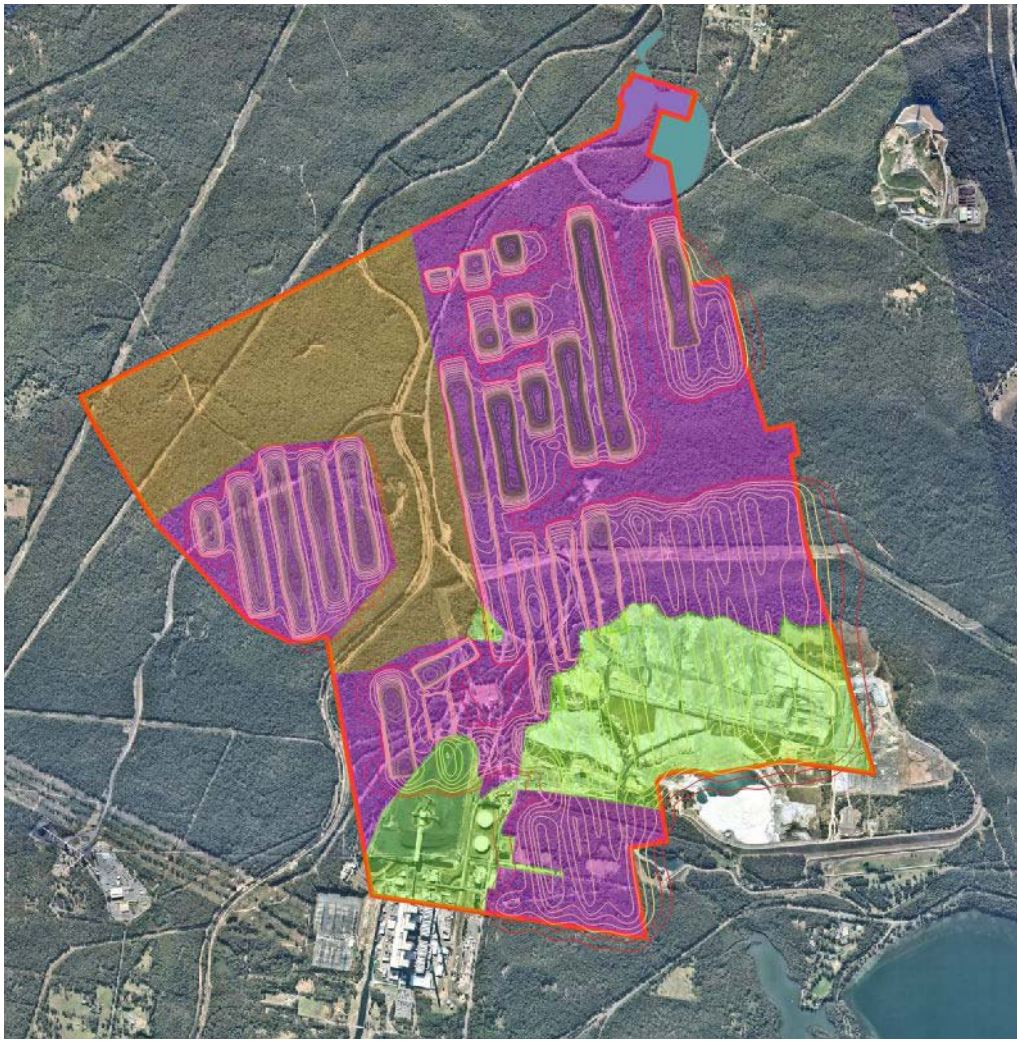


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

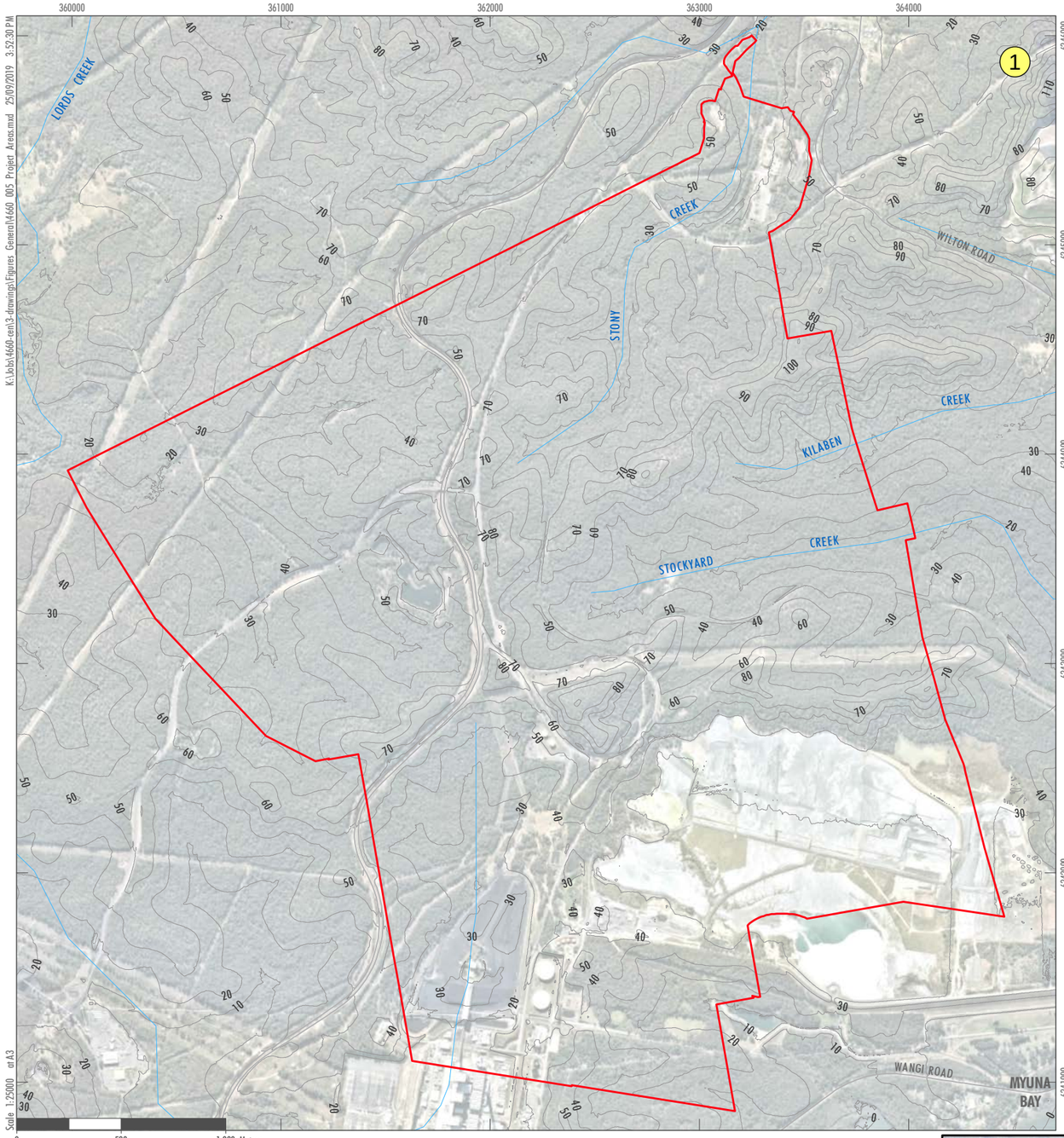
Name of Authorised Person: _____

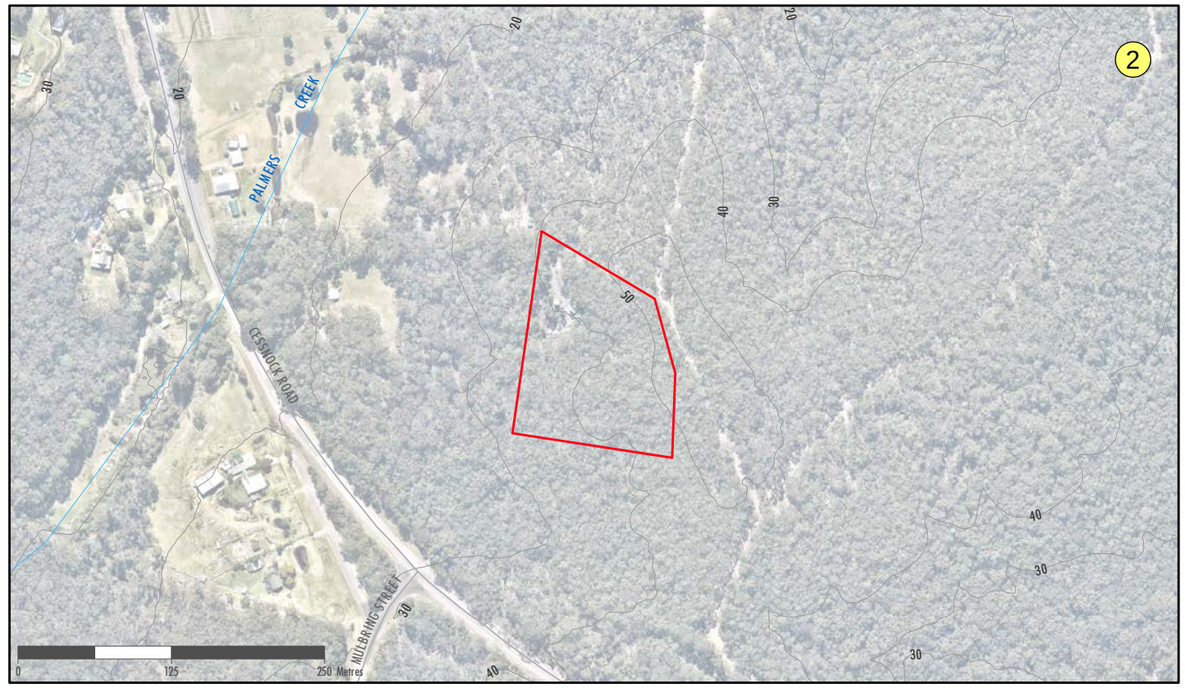
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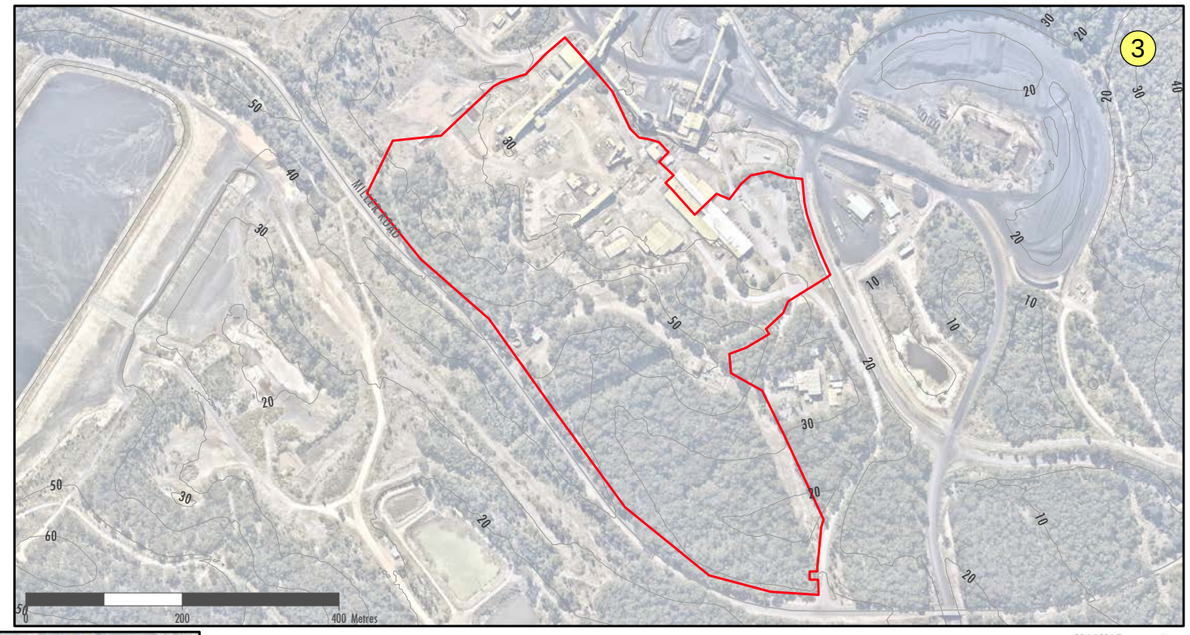
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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

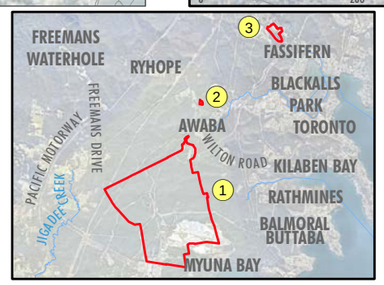


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

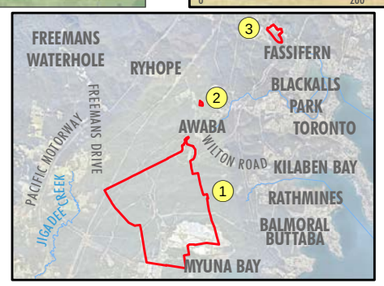
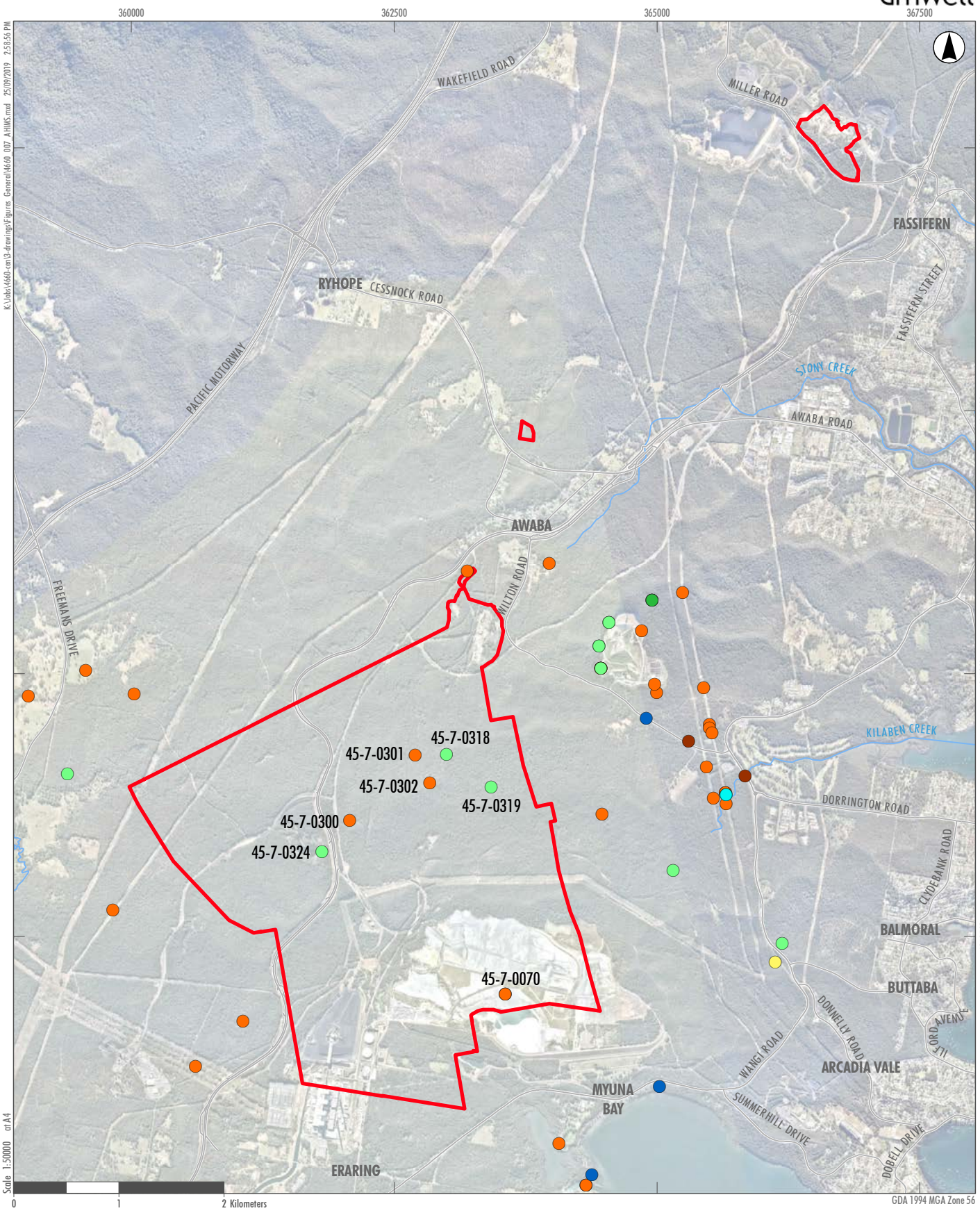


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



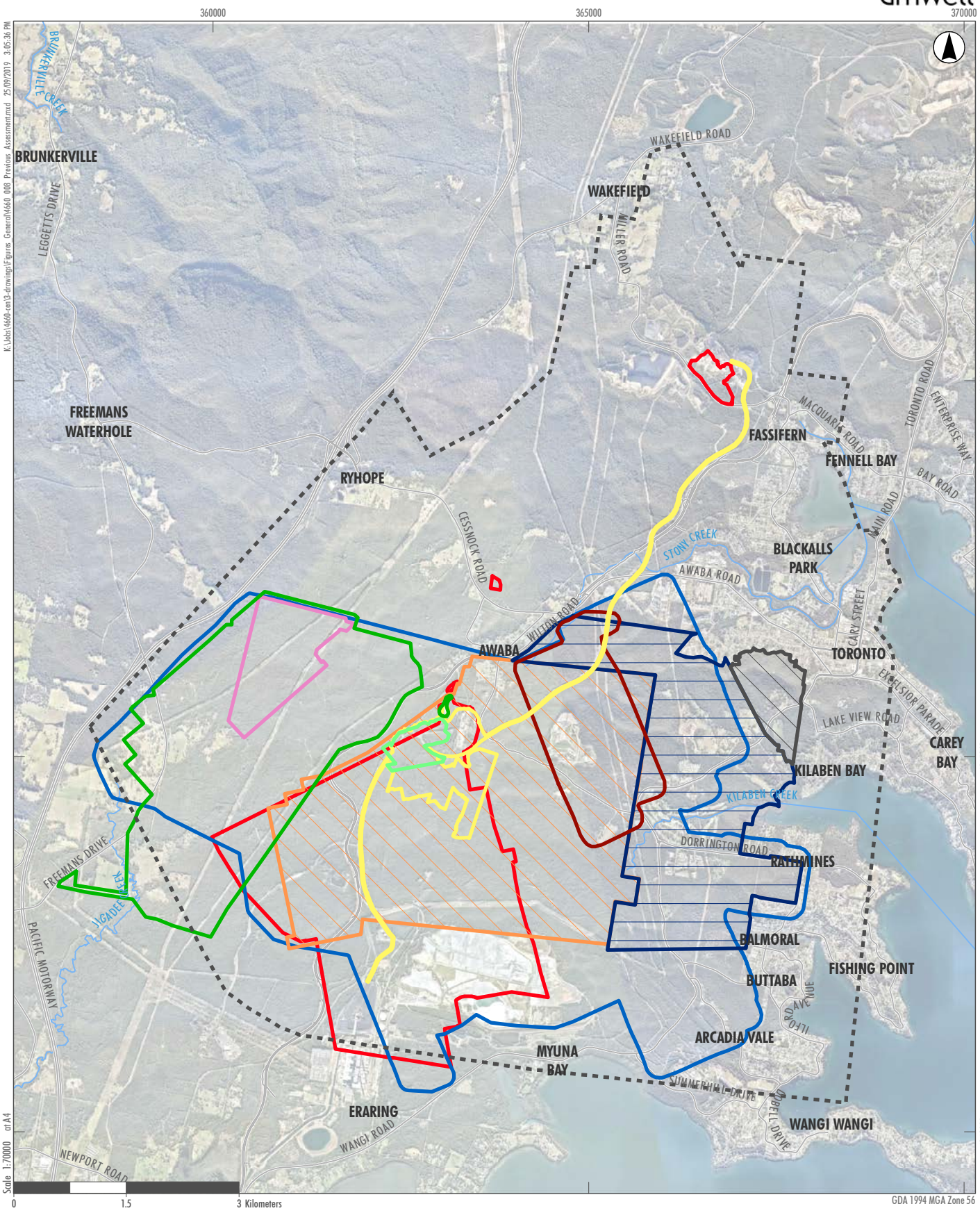
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



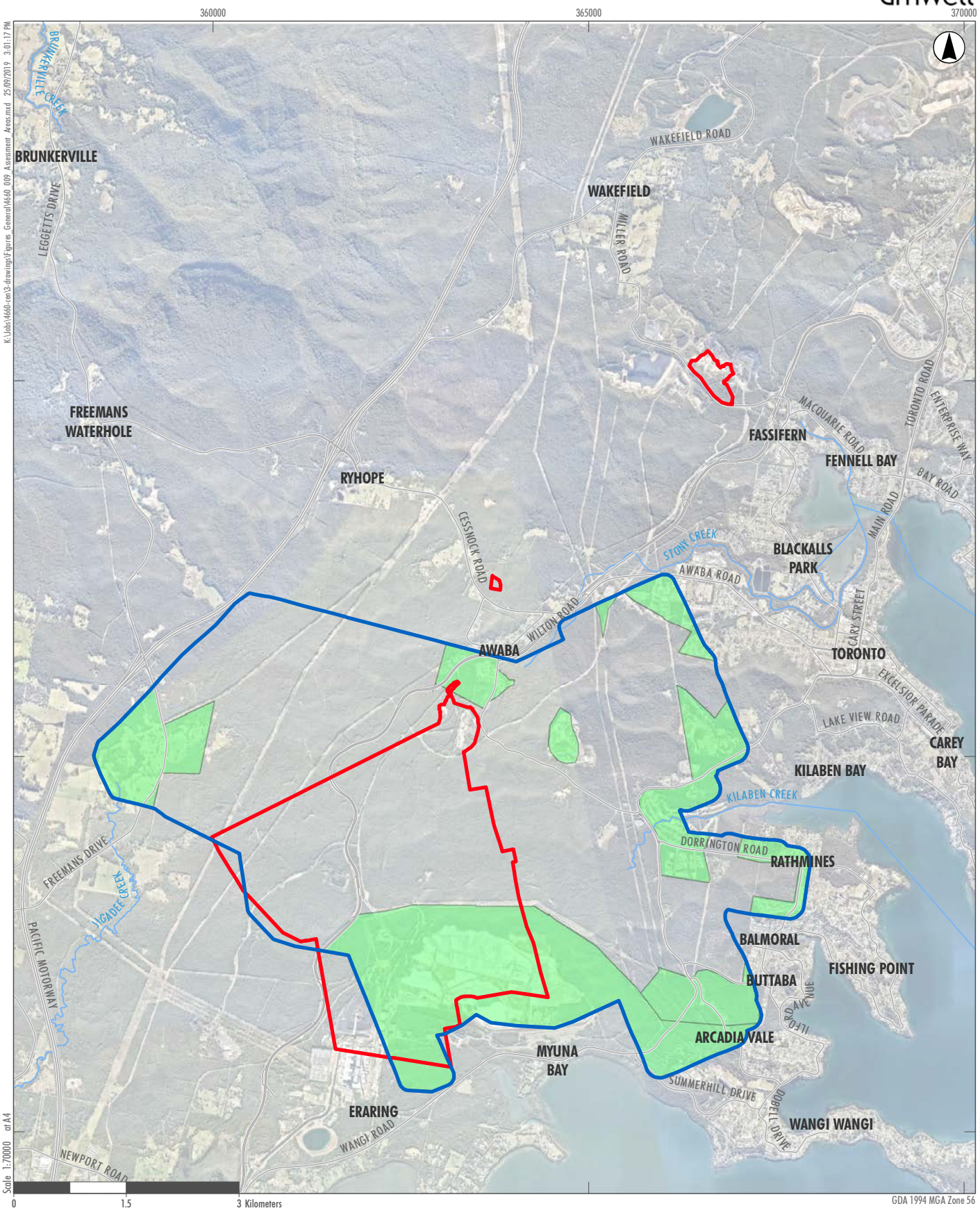
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Yinarr Cultural Services
Kathie Steward Kinchela

yinarrculturalservices@gmail.com
dontminemeay@gmail.com

Dear Kathie Steward Kinchela

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

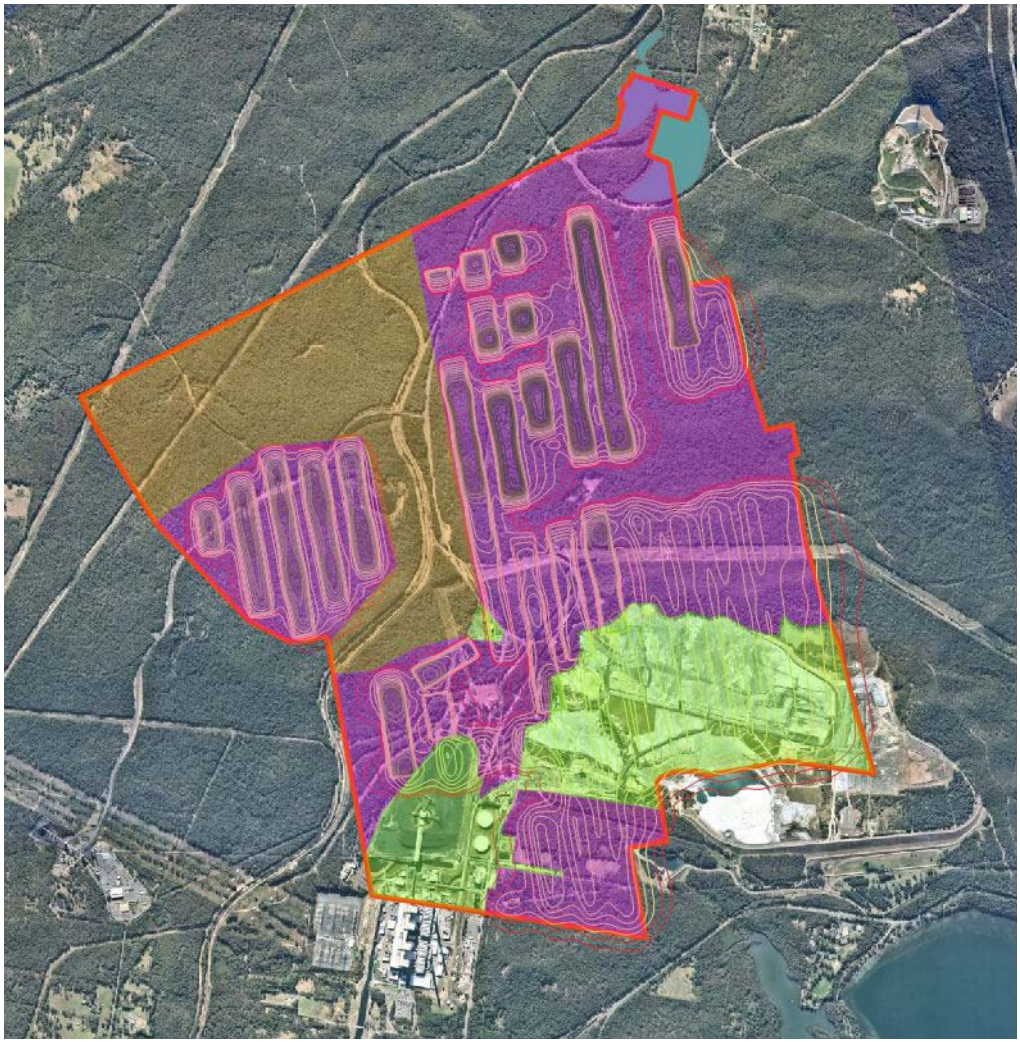


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

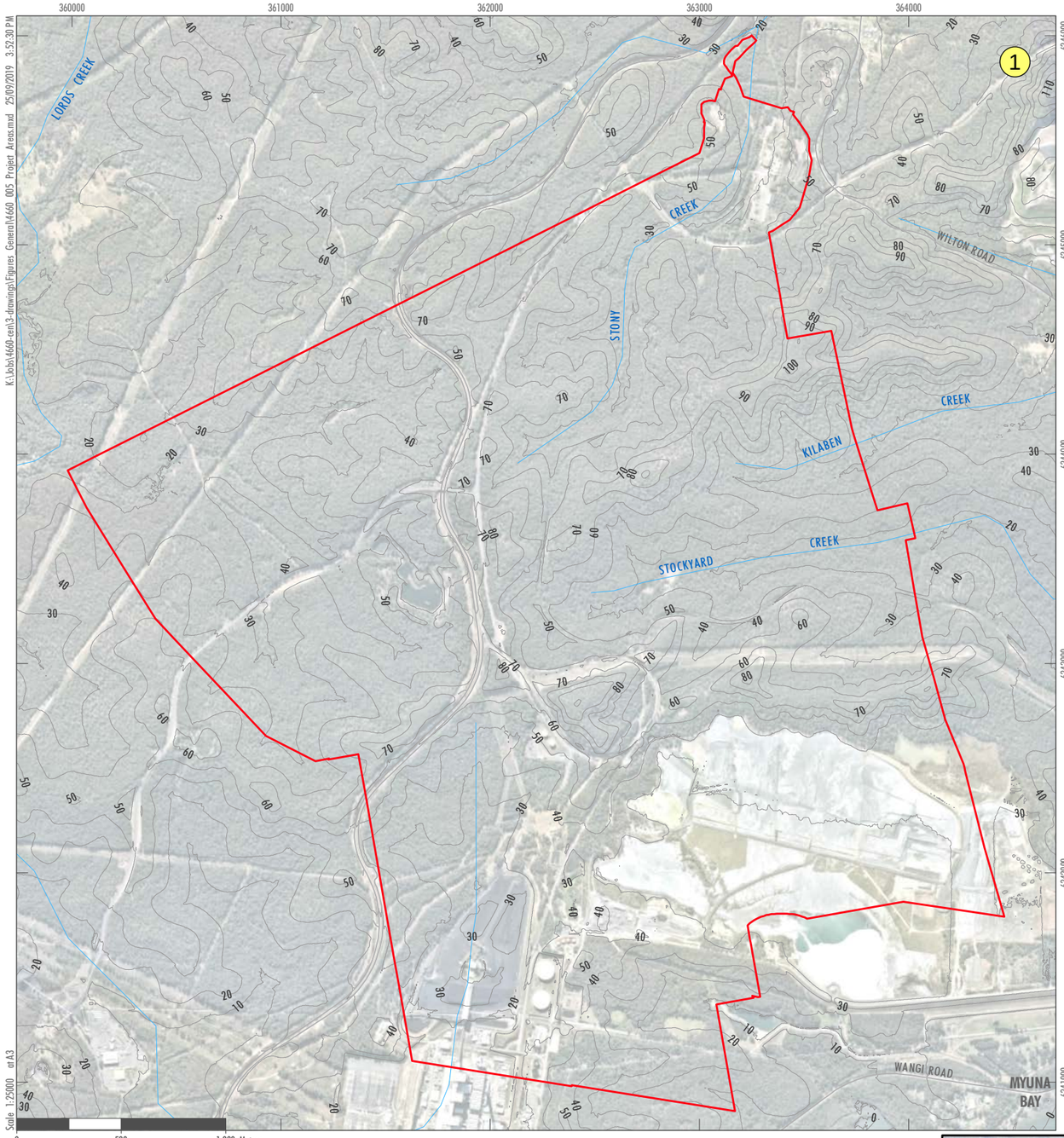
Name of Authorised Person: _____

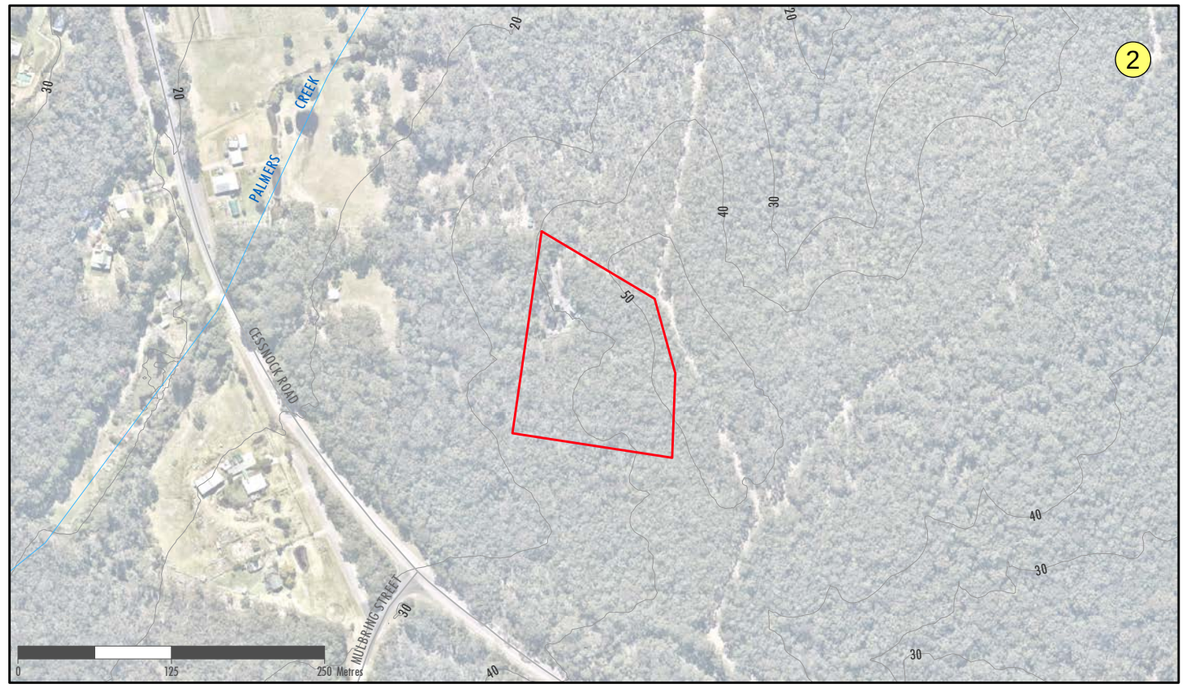
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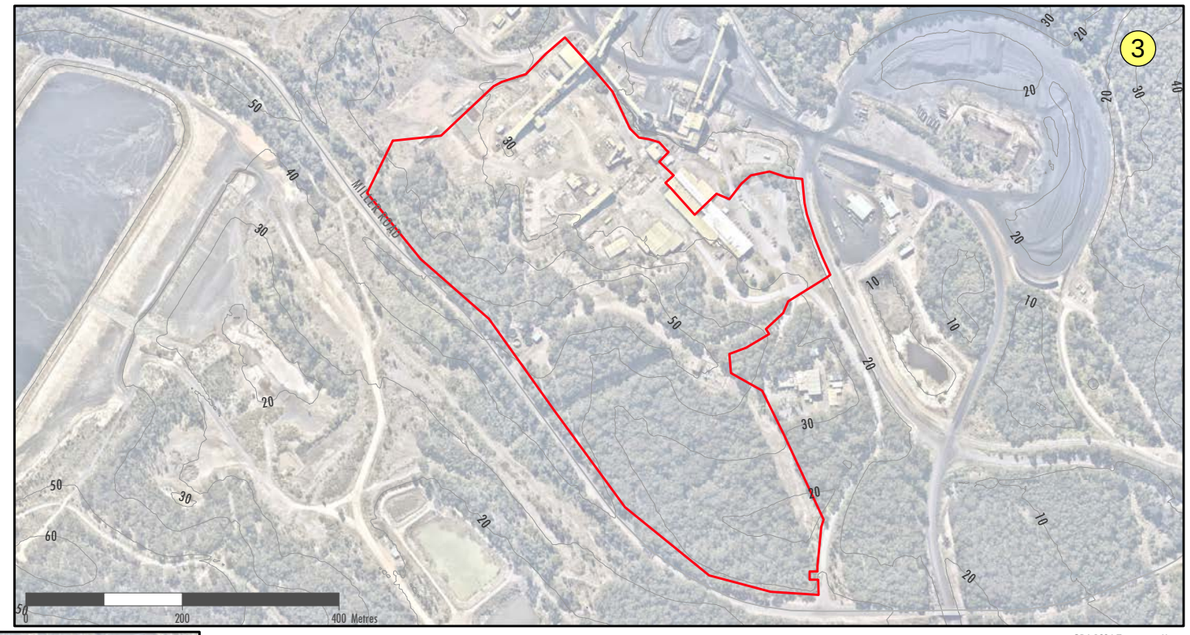
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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

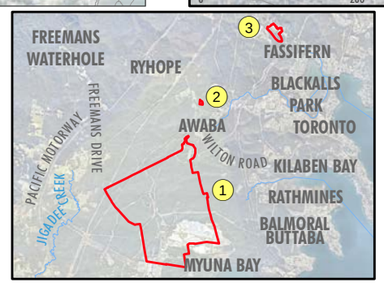


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

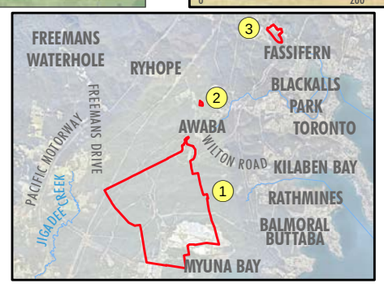
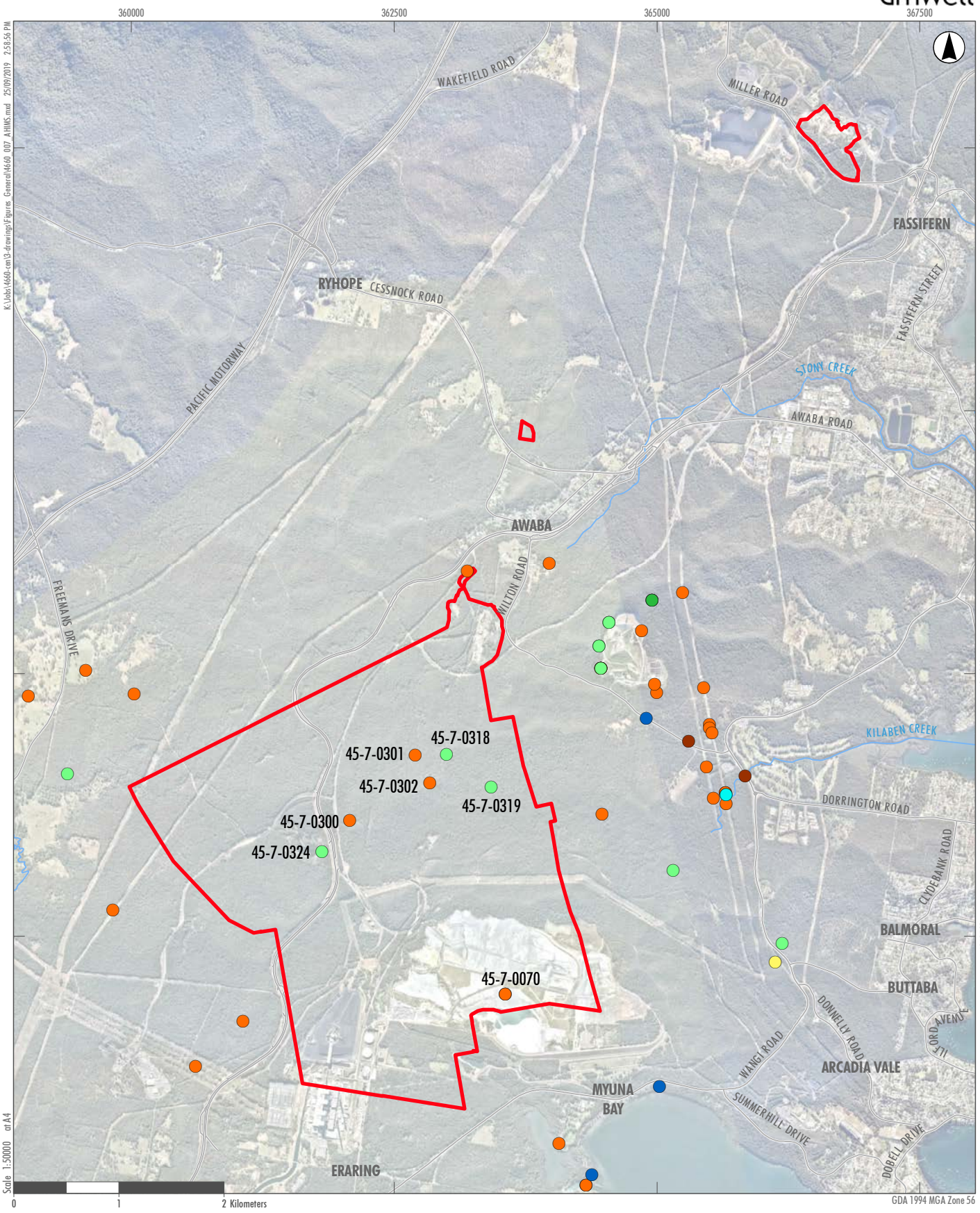


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



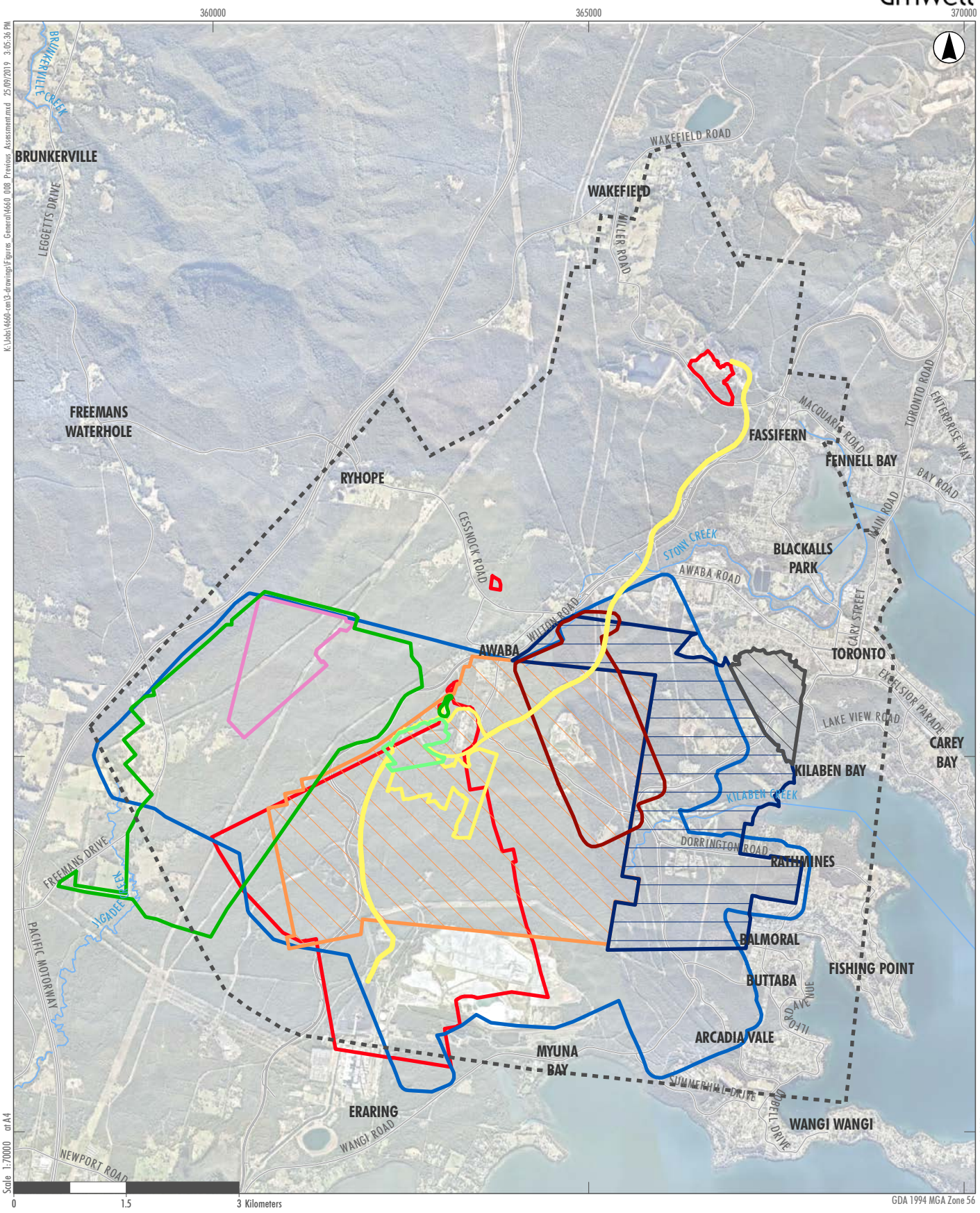
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



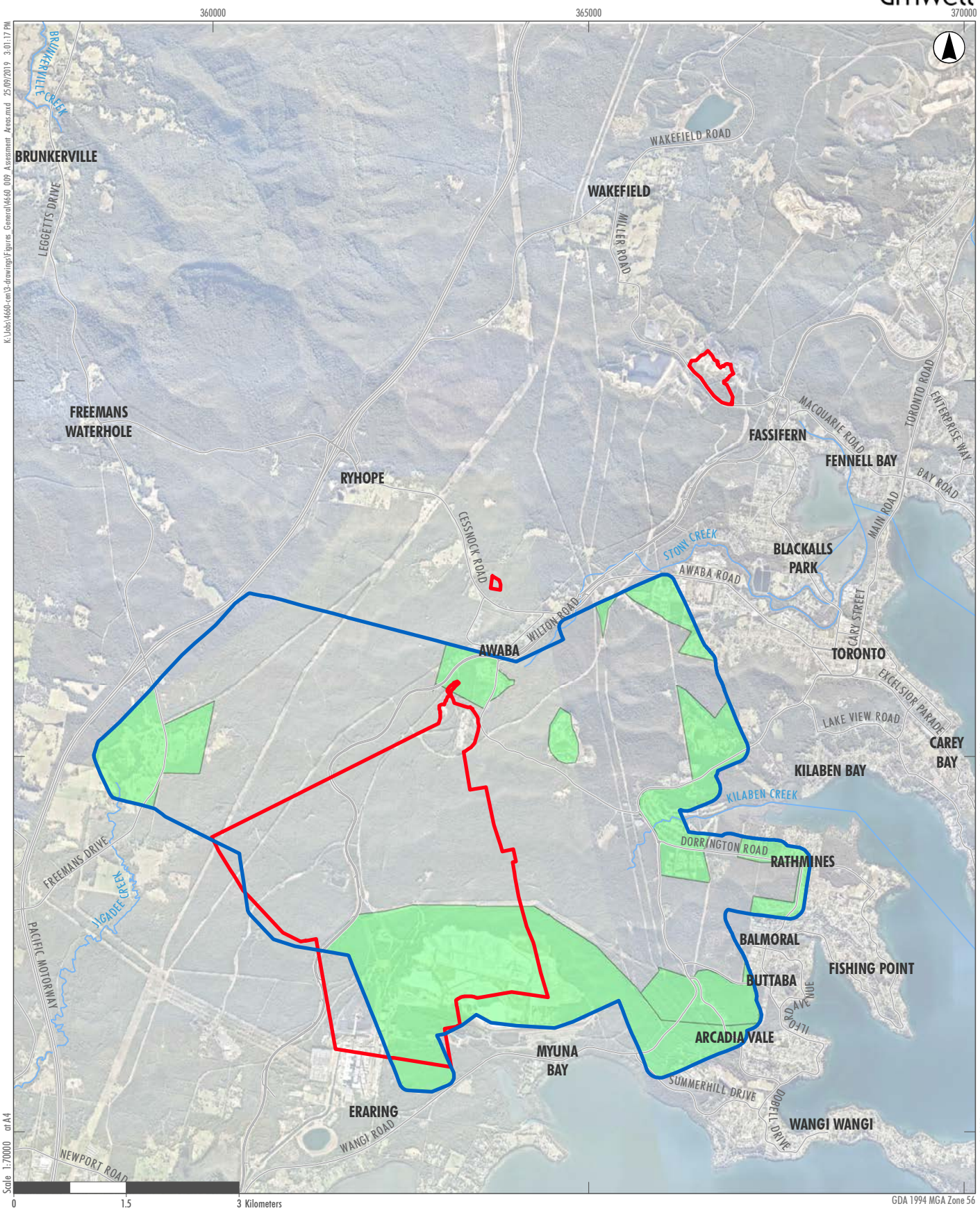
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Worimi Aboriginal Cultural Services
Tamara Towers

worimiacs@gmail.com

Dear Tamara Towers

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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75 York Street
Teralba NSW 2284

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West Perth WA 6005
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West Perth WA 6872

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Umwelt (Australia) Pty Limited
ABN: 18 059 519 041

1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

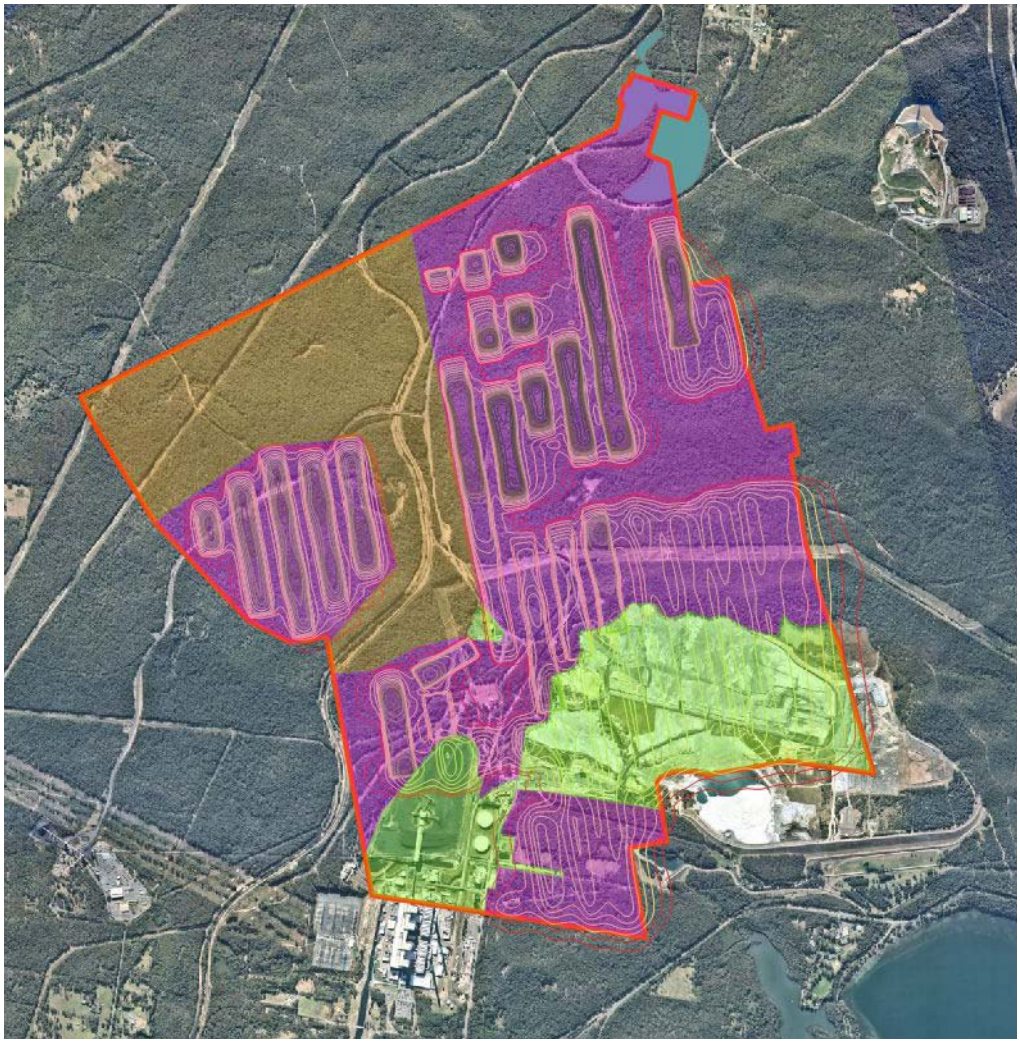


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

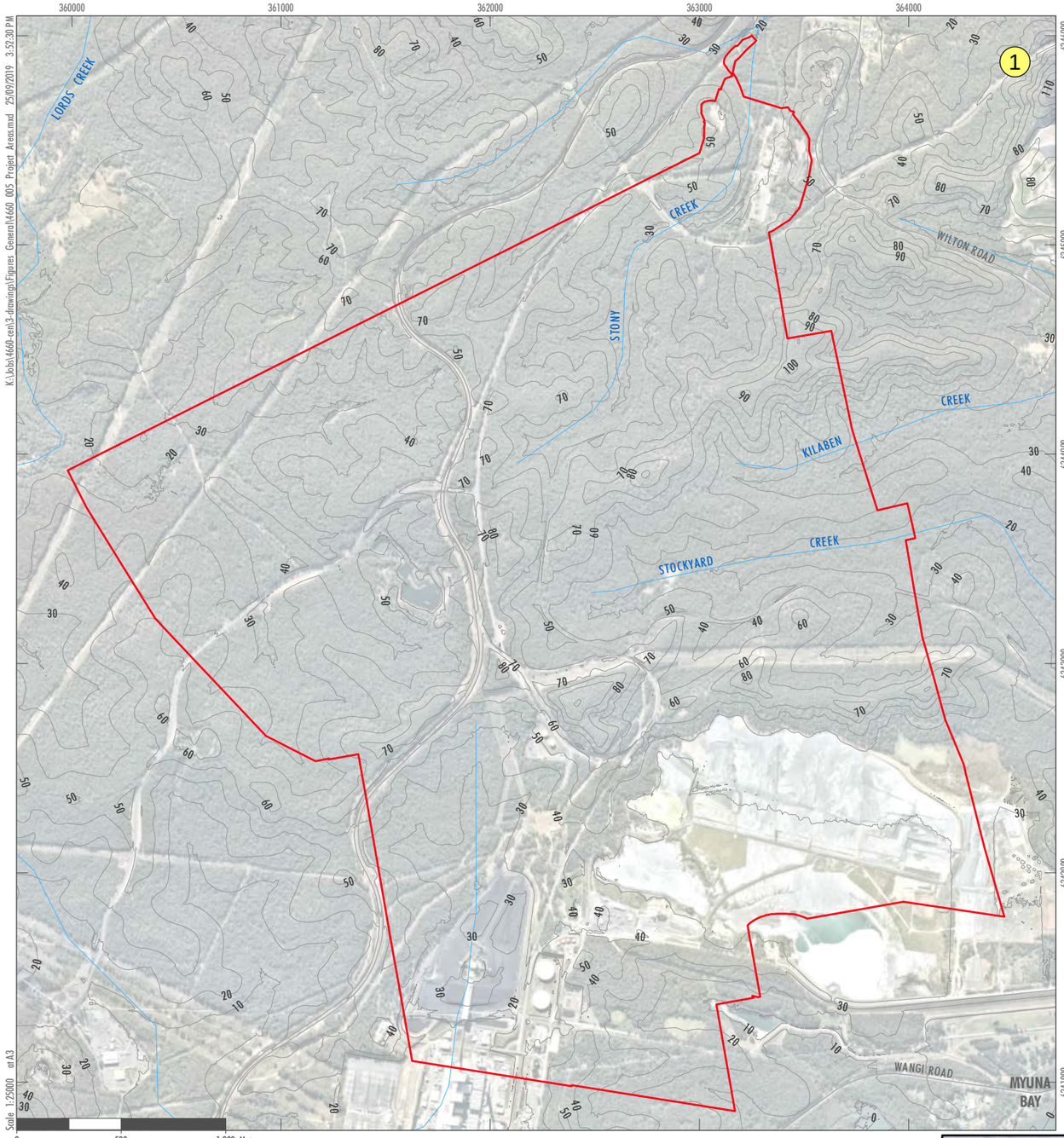
Name of Authorised Person: _____

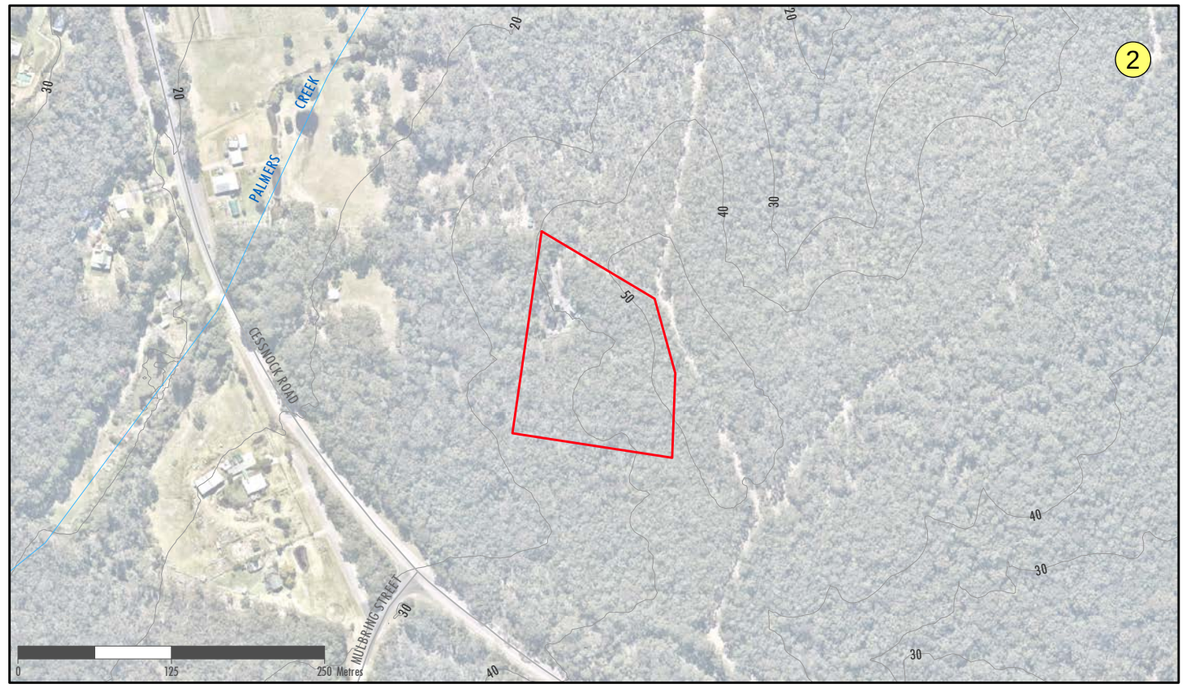
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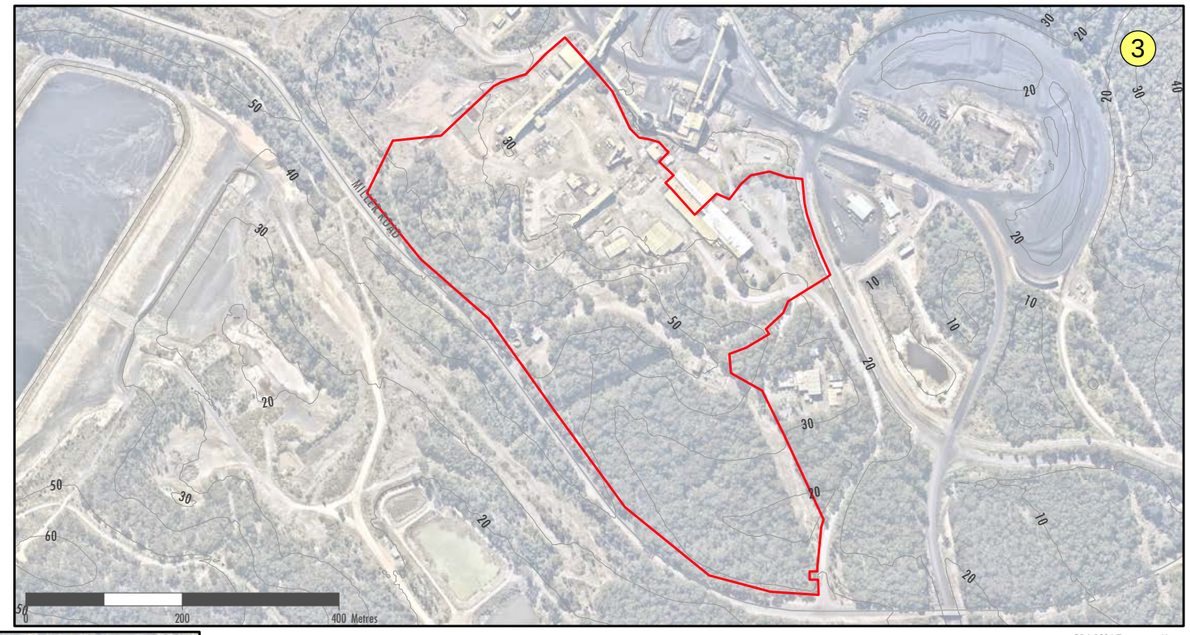
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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

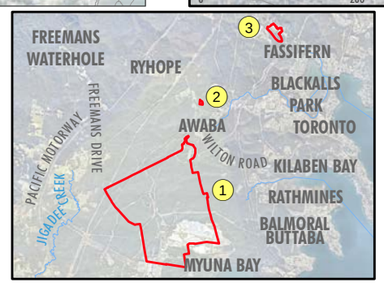


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

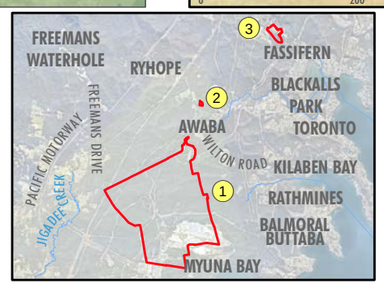
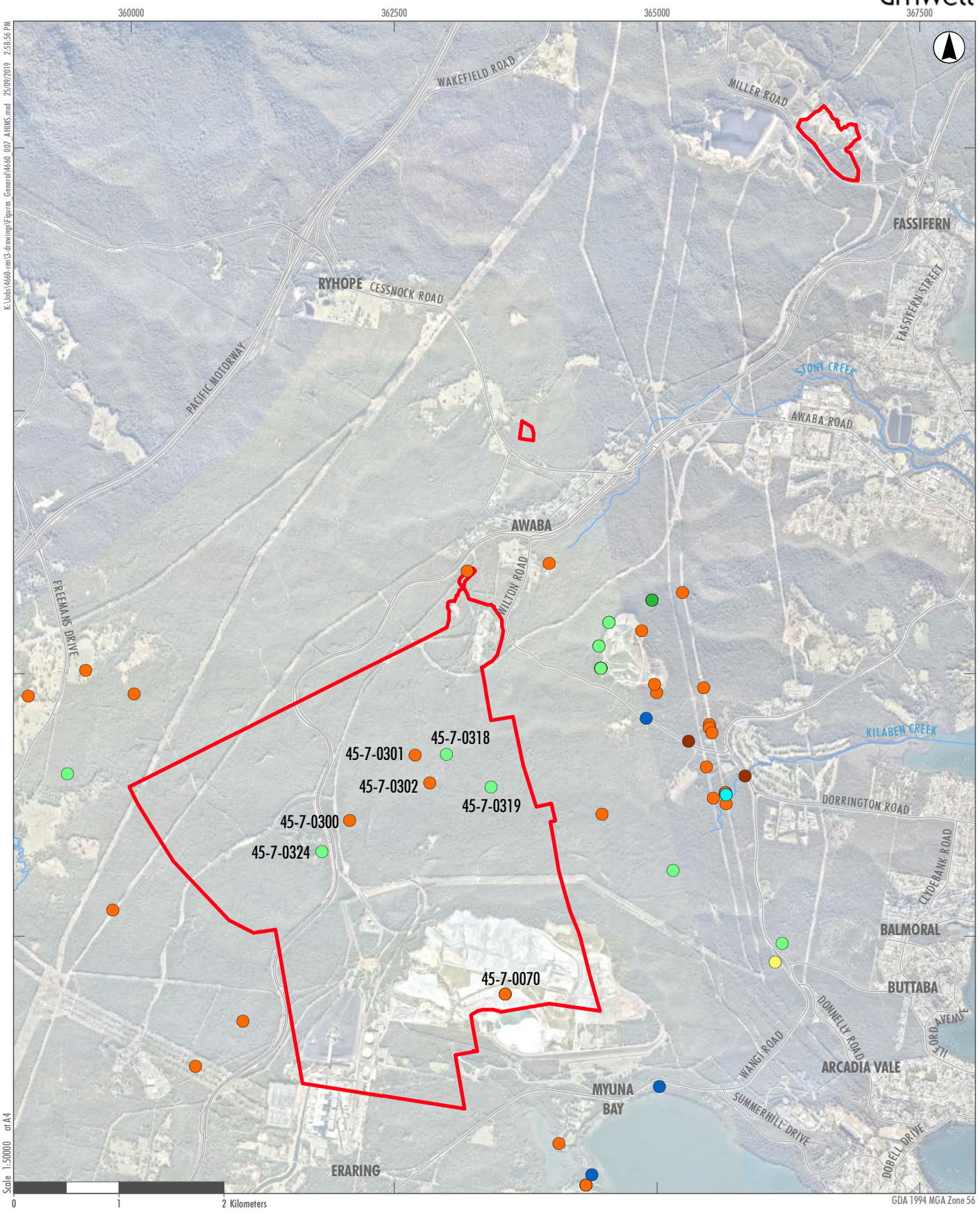


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



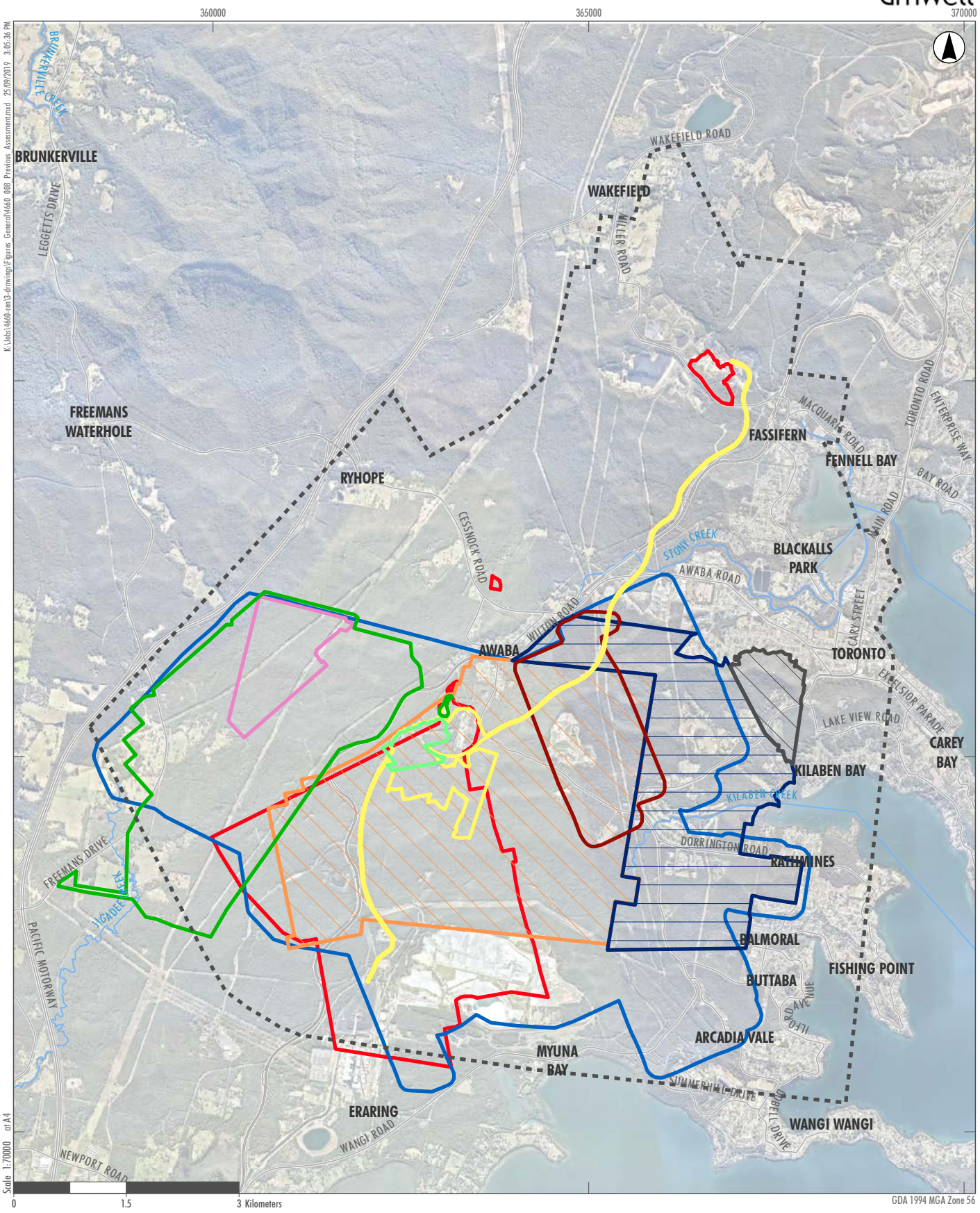
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



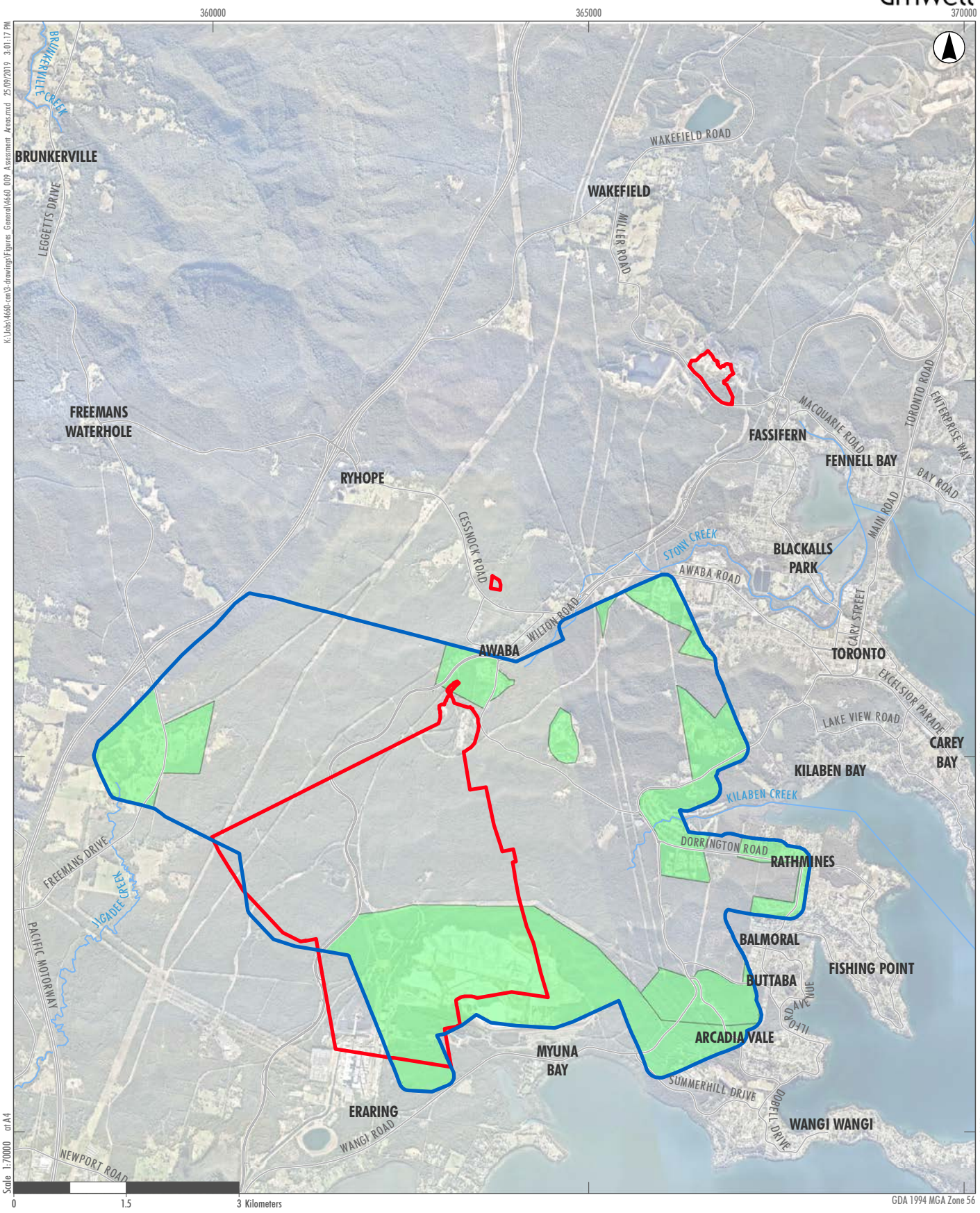
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Inspired People
Dedicated Team
Quality Outcomes

Our Ref: 4660/NR/KV/01102019

1 October 2019

Widescope
Steven Hickey

widescope.group@live.com

Dear Steven Hickey

Re: Proposed Newstan Mine Extension Project, NSW

Centennial Newstan is currently seeking approval for the continuation of mining within the West Borehole seam of Newstan Mine. This project, herein referred to as the 'Newstan Mine Extension Project', proposes to extract up to 25.9 million tonnes (Mt) over a fifteen year period at a maximum production rate of 4 million tonnes per annum of Run of Mine (ROM) coal (Mtpa) using bord and pillar mining. Surface facilities will also be required at the existing Awaba Colliery Surface Site. The project area, including all areas of proposed works, is shown in **Figure 1**.

Umwelt Environmental and Social Consultants (Umwelt) have been engaged by Centennial Coal to prepare an Aboriginal Cultural Heritage Assessment (ACHA) (incorporating an archaeological technical report) for the project in consultation with the registered Aboriginal parties, including your organisation.

The ACHA will form part of the Environmental Impact Statement (EIS) for the project, and will be undertaken in accordance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation 2019* (NPW Regulation), the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage [OEH] 2011), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water [DECCW] 2010) (the consultation requirements) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice).

As a registered Aboriginal party for the project, we are writing to provide you with the draft methodology for the ACHA for your review and comment.

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Teralba NSW 2284

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Umwelt (Australia) Pty Limited
ABN: 18 059 519 041

1.0 Description of the Project

A summary of works associated with the project that will or may result in disturbance to the ground and/or sub-surface within the project area are provided below for reference. A complete project description is provided in the *Newstan Extension Scoping Report*, prepared by Centennial Coal.

1.1 Proposed Mining Activities

Bord and pillar mining will be undertaken using continuous miner methods and will include areas of first workings, partial extraction and total extraction. A mix of metallurgical and thermal coal will be extracted. ROM coal will be delivered to the Newstan Colliery Surface Site via a series of existing underground conveyors. The combination of first workings, partial and total extraction has been adopted to mitigate potential subsidence impacts on sensitive surface features.

The potential extent of subsidence associated with the project is shown in **Plate 6.1** and discussed further in relation to the proposed sampling strategy in **Section 6.1**.

1.2 Surface Infrastructure

The project will utilise the existing surface infrastructure of the Newstan and Awaba Collieries. Upgrades and additions to the existing surface facilities are proposed at the Awaba Colliery Surface Site, including:

- Installation and operation of a new ventilation facility at the Awaba Colliery Surface Site following the completion of first workings (within the area shown as Area 1 in **Figure 1**).
- Construction and operation of a new gas flaring facility within the confines of the current disturbance area at the Awaba Colliery Surface Site (Area 1 in **Figure 1**).
- Upgrades to the existing electrical and communications equipment at Newstan and Awaba Colliery Surface Sites (Areas 1 and 3 in **Figure 1**).

1.3 Utility and Infrastructure Relocations

Utility and infrastructure relocations are not proposed as part of the project. However, subsidence mitigation works to existing surface infrastructure are expected to be required. Where required, these will occur within the defined project area.

1.4 Surface Water and Groundwater Management System

The existing groundwater model for Newstan Colliery will be revised and any upgrades to the existing water management system will be considered during the preparation of the EIS. Surface water management at the Newstan Colliery Surface Site will continue as approved under the development consent for the Northern Coal Logistics Project (SSD- 5145).

Surface water management at the Awaba Colliery will continue and include the utilisation of existing and approved licensed water discharge points. Any upgrades to the Awaba Colliery surface water management system will be considered during the preparation of the EIS.

1.5 Construction Activities and Facilities

Construction activities will be undertaken within previously disturbed areas. Existing surface facilities will be utilised where practicable to minimise the need for temporary construction facilities.

1.6 Rehabilitation and Final Landform

Following the completion of mining, the Awaba Colliery Surface Site will be decommissioned and the area rehabilitated such that it can support land uses similar to those that occurred prior to mining. The proposed post-mining land use will be determined in consultation with Lake Macquarie City Council and with consideration of land zoning within and surrounding the site. It is expected that the Newstan Colliery Surface Site will be decommissioned and rehabilitated as part of closure activities for the Northern Coal Logistics Project in accordance with the requirements of SSD-5145.

A detailed rehabilitation strategy for the project will be developed in consultation with stakeholders and with consideration of relevant standards and guidelines, and the detailed environmental investigations undertaken as part of the EIS.

2.0 Description of the Project Area

For the purposes of the ACHA, the area proposed for impact as a result of the project comprises the proposed extension of mining area (Area 1), the Awaba Surface Colliery Site (Area 1), the Forest Road Ballast Borehole and Services Site (Area 2) and the Newstan Colliery Surface Site (Area 3), as shown in **Figure 1**). These areas are herein collectively referred to as the 'project area'.

Based on the available topographic mapping, the proposed impact areas are primarily located on level – gently inclined to moderately inclined slopes, with elevations between 20 and 50 metres Australian Height Datum (AHD). There are also discrete areas of crest and discontinuous ridgelines, as well as spur crests (**Figure 1** and **Figure 2**). There are also a number of watercourses present within the surrounding landscape, including Stony Creek, Stockyard Creek and Kilaben Creek. First order tributaries of these watercourses extend into the project area, as shown in **Figure 1**.

The geology and soils mapping for the project area indicates that it is located within the Awaba and Doyalson soil landscapes. The Awaba soil landscape is characterised by relatively shallow soils (up to 10cm of A_1 horizon topsoil overlies 10-30cm of A_2 horizon topsoil, which overlies subsoil) on gentle slopes (which are present within the project area, and slightly deeper soils (less than 30cm of A_1 horizon topsoil overlies less than 50cm of A_2 horizon topsoil) in association with drainage lines. Similarly, the Doyalson soil landscape comprises up to 10-20cm of A_1 horizon topsoil overlying 10-30cm of A_2 horizon topsoil across the majority of landforms, including drainage lines.

The areas surrounding the project area have been subject to previous archaeological assessments, and these previous assessments have resulted in the identification of a number of archaeological sites, as shown in **Figure 3**. The most common site type recorded in the search area is artefact scatters, followed by modified trees (carved or scarred). Within the surrounding landscape, these site types have not been recorded in association with specific landforms but do seem to correlate with less disturbed land. Shell midden sites have also been recorded, particularly in proximity to the foreshore of Lake Macquarie (located outside of the project area). Potential archaeological deposits, habitation structures and Aboriginal Ceremony and Dreaming sites have also been recorded, though these site types are all located outside of the current project area.

Within the project area itself, six Aboriginal archaeological sites have been recorded, including:

- Two isolated artefact sites (AHIMS #45-7-0300; AHIMS #45-7-0301).
- Three scarred trees (AHIMS #45-7-0318; AHIMS #45-7-0319; AHIMS #45-7-0324).
- One artefact scatter (AHIMS #45-7-0302).

The proposed impact areas have been subject to variable levels of disturbance, with key disturbance activities being the construction and ongoing use of existing access tracks and roads, the construction and ongoing use of Eraring Power Station and associated ash dams, existing mining infrastructure (particularly in association with the existing surface sites), and ancillary impacts caused by general infrastructure (including easements, fencing, services, etc).

The environmental and archaeological contextual information presented above has been taken into consideration in developing the survey methodology is provided in **Section 5**.

3.0 Previous Investigations

Both the project area and surrounding landscape have been subject to archaeological survey previously, as shown in **Figure 4**. The most relevant previous survey was that undertaken by RPS in 2013; the area assessed by RPS is shown in the blue outline in **Figure 4** and **Figure 5**.

Although their assessment area overlaps almost the entirety of the current project area, the survey was undertaken over 6 years ago and no detailed survey data is available. As such, it is proposed to re-survey the project area to ensure that the ACHA currently being produced reflects the most accurate and up to date information. Areas subject to survey by RPS are shown in **Figure 5**.

With regard to the distribution of registered Aboriginal archaeological sites, the RPS report concluded that:

> *Based on the location of the sites in relation to the three landform units, the results indicate that a high percentage of artefact scatters and artefact scatters with PADs are in the lowlands, particularly along fluvial beds and creek lines. Artefact scatters do appear along the mid slopes and lower slopes, although in fewer numbers, but were rarely identified on ridge lines and steep upper slopes. Only a single shell midden had been previously recorded inside the PAA, situated near the existing ash dam.*
>
> *A review of the archaeological literature indicates that the distribution of shell middens in the Lake Macquarie Region is primarily concentrated on lowland regions adjacent to Lake Macquarie. Conversely, there does not appear to be a defined geographical trend in terms of where isolated finds are distributed throughout the landscape. Although a higher percentage of isolated finds were near the fluvial creek beds in the lowlands, they occur in fairly consistent numbers along the mid and elevated plateaus.*
>
> *Rockshelters and rockshelters with PADs were all restricted to steep ridges and escarpments because this is where suitable sandstone was outcropping and had developed sufficient cavities in the rock which could be used as occupation sites.*
>
> *A higher percentage of scarred trees were present in areas of higher elevation on ridgelines and upper sloped areas, gradually dropping in frequency along the mid - lower slopes and fluvial creek beds. It is likely that more scarred trees were present in the area, but has been removed due to logging practices in the 1800s and early 1900s and thus has affected their current distribution. However, the practice of scarring trees may have also been influenced by their proximity to Aboriginal occupation areas, travel routes, tree species distributions and similar factors.*

It is anticipated that the above described spatial distribution of sites in the landscape will be applicable to the current project areas. The results of RPS' survey, as well as other surveys undertaken in the area (refer to **Figure 4**) will be used to formulate the predictive model for the ACHA currently being prepared.

4.0 Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment

As discussed in **Section 1.0**, the consultation process will be undertaken in accordance with the consultation requirements (DECCW 2010). The proposed methodology for the ACHA (pending comments from registered Aboriginal parties) is as follows:

1. Provide information to all registered Aboriginal parties regarding the project, including a draft methodology for review and comment (this letter).

2. Provision of a review period during which Aboriginal parties can provide comment and propose amendments to the draft methodology (up to 28 days from receipt of this letter, with comments due by close of business **1 November 2019**).

3. Completion of a survey of the project area in accordance with the draft methodology provided in this assessment (refer to **Section 6.0**).

4. Develop a draft ACHA report to include:

    - details of the nature of the project

    - details of the Secretary's Environmental Assessment Requirement (SEARs) for Aboriginal cultural heritage, and how the ACHA report addresses these requirements, including:

        - identification of the Aboriginal cultural heritage values that exist across the area that will be impacted by the development. Identification of these values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).*

        - consultation with Aboriginal people in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* Full details of this consultation process will be captured.

        - documentation of the potential impacts of the development on Aboriginal cultural heritage values, and demonstration of attempts to avoid impact and identify any conservation outcomes.

        - records of any objects identified during the assessment and provision of this documentation to OEH

    - the results of an OEH Aboriginal Heritage Information Management System (AHIMS) search and Native Title search

    - a review of the cultural context of the area that will draw heavily on information provided by registered Aboriginal parties and the results of previous cultural heritage and archaeological assessments undertaken in the area

    - a review of background information related to the environmental characteristics of the project area that may have determined how Aboriginal people may have occupied/utilised the area and the likelihood of site survival

    - the preparation of a predictive model drawing on all of the above

    - details of the survey methodology and results

    - details of any sites/objects/potential archaeological deposits located during the survey

- an assessment of the Aboriginal cultural heritage significance (as provided by the registered Aboriginal parties) of the project area
- an assessment of the archaeological significance of any sites/objects/potential archaeological deposits identified within the project area
- an assessment of the potential impact by the project to any sites/objects/potential archaeological deposits identified within the project area
- a discussion of management options and
- management recommendations.

5. The provision of the draft ACHA report to registered Aboriginal parties for review and comment (comment period extends for 28 days from date of provision of the draft ACHA).

6. Discussion/incorporation of comments/responses received from Aboriginal parties to develop and finalise the ACHA report.

7. Provision of the final ACHA report to registered Aboriginal parties and to Centennial Coal for inclusion within the EIS.

5.0 Consultation with Aboriginal Parties During the Assessment Process

Umwelt acknowledges and understands that cultural values, by definition, relate to values outside those associated with specific archaeological sites/objects. Throughout the assessment process, we invite comment from Aboriginal parties regarding any cultural values associated with the project area and will ensure that any information provided regarding cultural values (be they associated with a specific site or provided with reference to a landscape feature or within a broader context) are documented and recorded in accordance with the wishes of the relevant Aboriginal party for inclusion in the ACHA report. We note that the inclusion of any such information in the final assessment is dependent on its provision by the Aboriginal parties.

We note that Section 3.2 of the consultation requirements specifies that the objective of consultation is to ensure 'that Aboriginal people have the opportunity to improve assessment outcomes'. Factors specified as assisting in meeting this objective include providing Aboriginal parties with the opportunity to provide information on cultural values (as invited in this draft methodology), influence methods regarding assessment of significance for Aboriginal objects/places (which can be undertaken in response to this draft methodology, during fieldwork and in commenting on the draft ACHA report) and commenting on the draft ACHA report. Our approach is designed to ensure compliance with this objective, including the potential for in-field consultation with Aboriginal party representatives during fieldwork. Umwelt archaeologists are trained to seek and document cultural feedback provided by Aboriginal party representatives during fieldwork. This is not limited to cultural values associated with archaeological sites but may encompass any values identified by Aboriginal people.

We look forward to working with your organisation throughout the project to ensure that we adequately document any information you wish to provide regarding Aboriginal cultural values. Please feel free to contact us to request any additional information or assistance you may require to facilitate the provision of your input.

6.0 Survey Methodology

The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). This includes development of an appropriate sampling strategy and recording of information during survey.

6.1 Sampling Strategy

The survey will be undertaken to ensure that a representative sample of all landforms within the project area is surveyed, as required to ensure compliance with Code of Practice.

Areas that have previously been clearly and demonstrably disturbed (e.g. land that forms part of the Eraring Power Station) will not be subject to detailed survey. These areas will be subject to high-level visual inspection to confirm the anticipated extent of disturbance based on aerial imagery. These areas are shown in green in **Plate 6.1** below.

Areas that will be subject to the greatest amount of potential subsidence impact (subsidence contours are shown in **Plate 6.1**) will be subject to intensive survey. This includes drainage lines (in association with which grinding grooves may be identified), slope areas likely to contain rock outcrop suitable for use as shelter (in association with which rockshelter sites may be identified) and crests and ridges (in association with which stone arrangements may be identified) where these landforms are mapped as intersecting with areas of subsidence. These areas are shown in purple in **Plate 6.1** below.

Areas mapped as being unlikely to be impacted by subsidence will be subject to targeted, rather than intensive survey. These areas are shown in orange in **Plate 6.1** below.

In addition, targeted survey of areas to be impacted within existing mine infrastructure areas will be undertaken.

All efforts will be made to achieve maximum survey coverage via pedestrian survey. It is noted, however, that vehicle transects may be used in some areas based on limited archaeological potential and/or where vegetation limits access and visibility. It is intended that the survey will be conducted over the course of up to 10 days by one archaeologist and up to four Aboriginal party representatives however this may be subject to change based on the number of sites recorded, ground surface visibility and other variables.

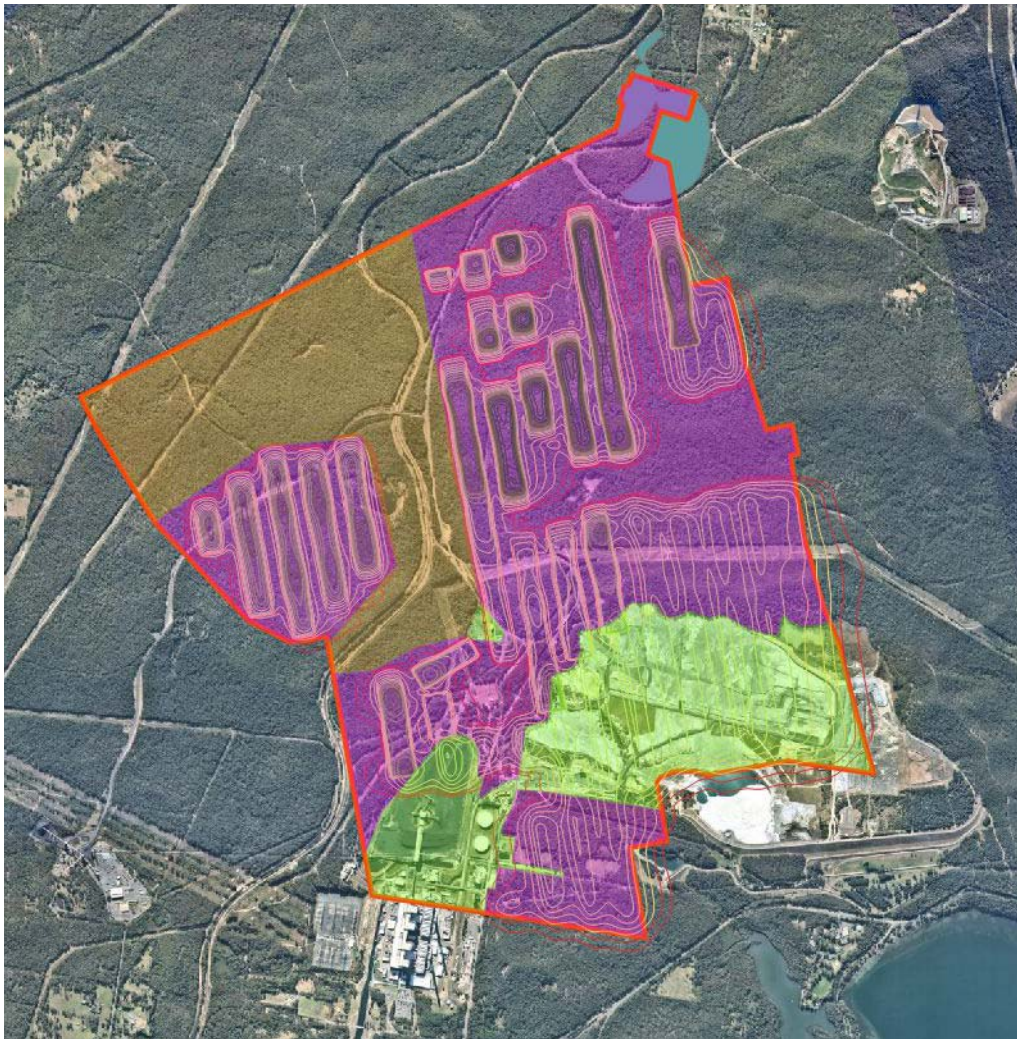


Figure 6.1 Proposed survey strategy

© Umwelt, 2019, MSEC 2019 over Nearmap Aerial

6.2 Recording of Information During Survey

Survey units will be defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects. Start and finish points/boundaries for survey units will be defined based on landforms, project area boundaries, access or other arbitrary terminations (as specified in the Code of Practice). The spacing between individuals will also be recorded for each survey unit.

Photographs will be undertaken for landforms/survey units (where informative). Information recorded for each survey unit will include

- Landform (in units based on those established by McDonald et al 2009)
- Gradient (where relevant)
- Vegetation

- Geology and soils (where suitable areas of exposure/visibility are present)
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water)
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice)
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information and
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

Any Aboriginal archaeological sites identified during the survey will be assessed with reference to the site boundaries. Factors that will be taken into consideration in defining and mapping site boundaries may include the distribution of surface artefacts, landforms or physical boundaries and cultural information.

Sufficient information will be recorded for all sites to meet Requirement 7 of the Code of Practice. The archaeological and Aboriginal cultural significance of any site will be discussed with the registered Aboriginal parties participating in the survey.

The archaeological potential of landforms/specific areas within the project area will be assessed with reference to factors including the archaeological context of the local area, the evaluation of the soil profile (based on soil landscape mapping, exposed soil profiles identified during the survey and geomorphic understandings of the area) and the identification of landforms that may have greater archaeological sensitivity. The extent of any area of identified archaeological potential will be defined and documented for inclusion in subsequent reporting. The archaeological and Aboriginal cultural significance of any area of identified archaeological potential will be discussed with the registered Aboriginal parties participating in the survey.

In relation to the assessment of rockshelter sites, it is proposed that a rockshelter will only be recorded as an archaeological site where archaeological evidence is identified in association with the rockshelter. However, the commitment to record archaeological potential will apply and therefore the final assessment will note where suitable rock overhangs/shelters occur but within which no archaeological evidence was identified.

6.3 Survey Arrangements

At this stage, it is proposed to undertake the survey in **November 2019**, however this is subject to confirmation. Further correspondence regarding survey arrangements will be provided at least two weeks prior to the proposed survey date. Additional information relating to engagement to undertake the survey is attached to this letter.

7.0 Other Requirements

The following will be required to enable commercial engagement for the work:

- Insurances are current (Workers Compensation, Public Liability and Product Liability). If you are unsure when your last insurance was entered into the Centennial system please call to confirm.
- Undertake a 2-hour induction at the Newstan Colliery Administration Office prior to the commencement of works.
- A medical for each person attending must be provided stating fitness to complete usual tasks.
- Minimum personal protective equipment (PPE) requirements are long pants and long sleeve high visibility shirt, steel toe capped boots and hard hat in construction areas.
- Each individual will bring their own food and water.
- Adhere to a minimum expectation of behaviour where all parties behave in an appropriate and respectful manner, and that culturally sensitivity is considered.
- Arrive on time and by own travel methods.

8.0 Summary

This letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322.

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Yours sincerely



Karyn Virgin
Senior Archaeologist

Enclosures: Archaeological Fieldwork Engagement Form
Figures: Figure 1 – Project Area
Figure 2 – Topography of the Project Area
Figure 3 – AHIMS Sites
Figure 4 – Previous Assessments
Figure 5 – Areas Surveyed by RPS 2013

Archaeological Fieldwork Engagement Form
Proposed Newstan Mine Extension Project, NSW

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	Response (circle response and provide detail)
Nominated field work representative and representative contact phone number.	Name:_____ Phone:_____
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	Y / N **Certificates of currency must be provided before engagement can be finalised**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	Y / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers • High visibility long sleeve shirt • Steel toe capped safety boots • Hard hat (for construction areas) • Soft hat (outside construction areas).	Y / N
Has completed the medical as required by Centennial.	Y / N **Provide details/copy of completed medical.**
Our representative understands that they will need to bring with them sufficient foot and water for the day's work.	Y/ N
Our representative has demonstrated appropriate experience, ability and reliability.	Y / N

Item	Response (circle response and provide detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: _____

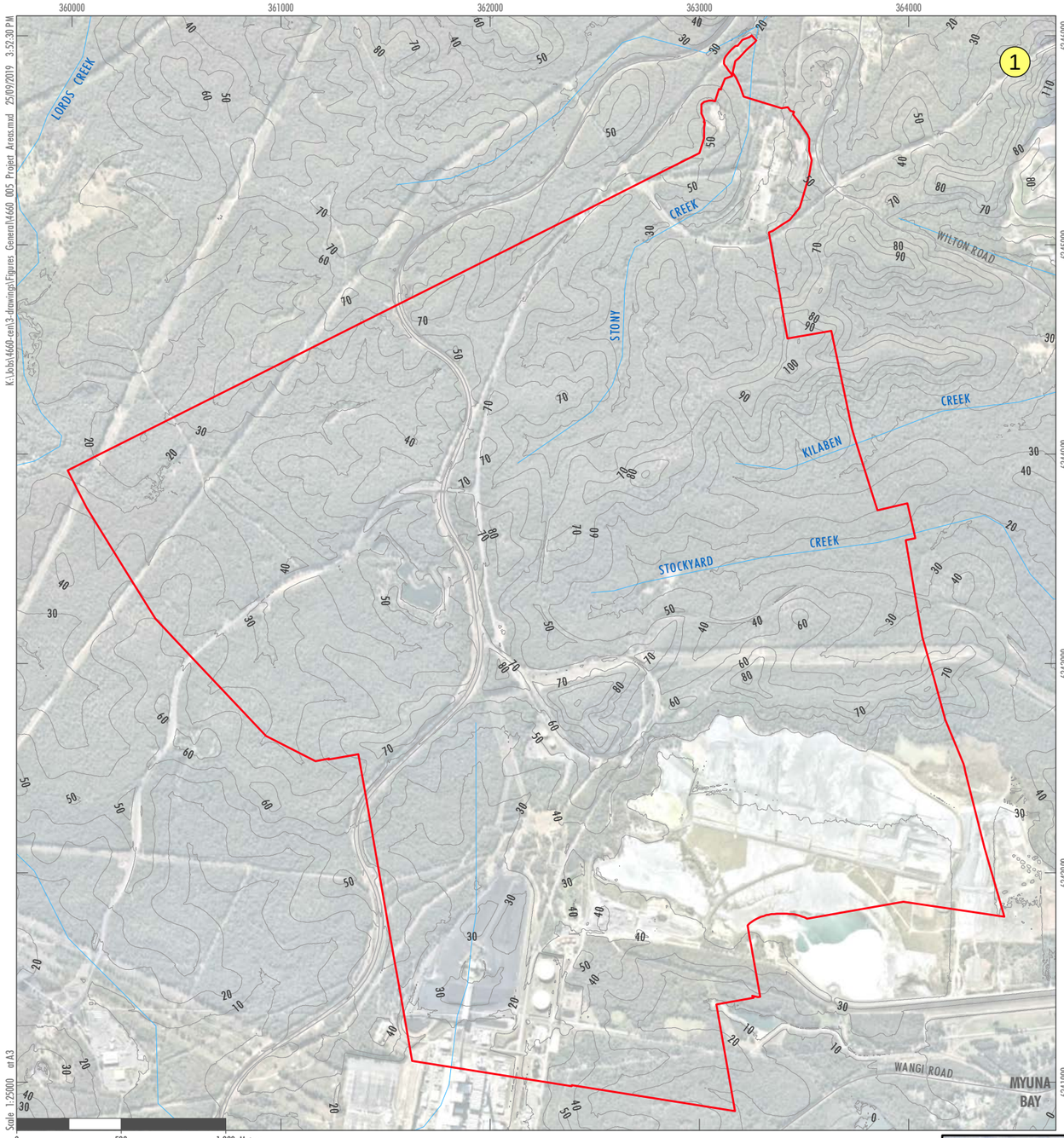
Name of Authorised Person: _____

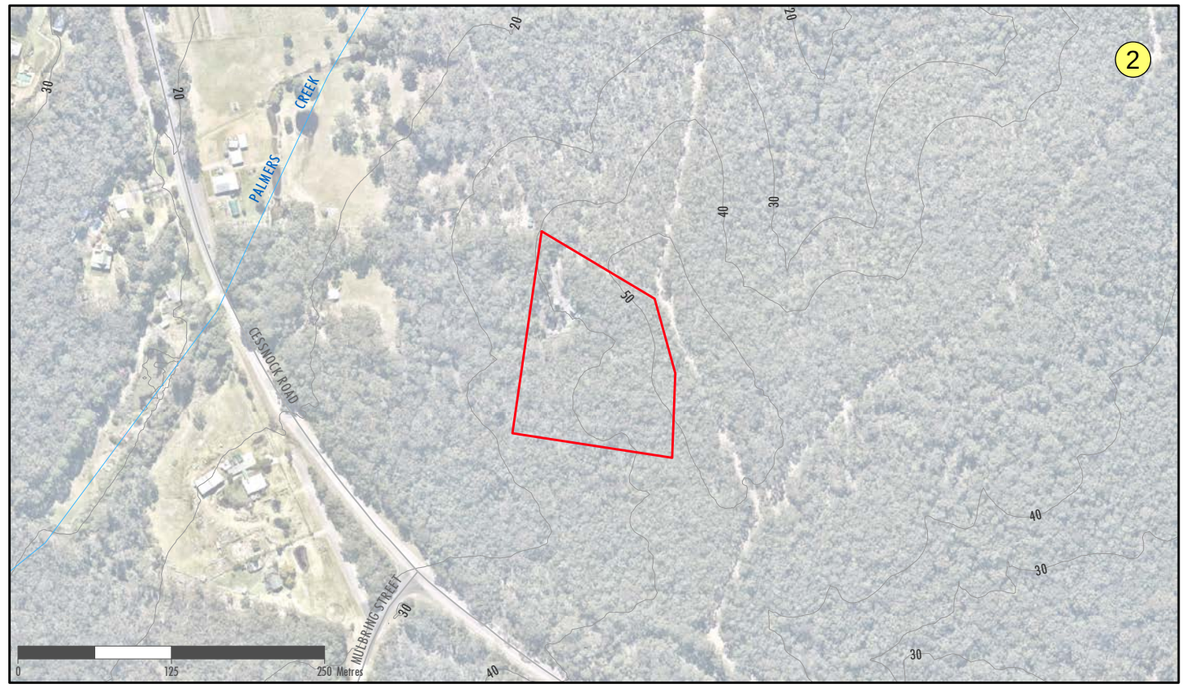
Signature: _____

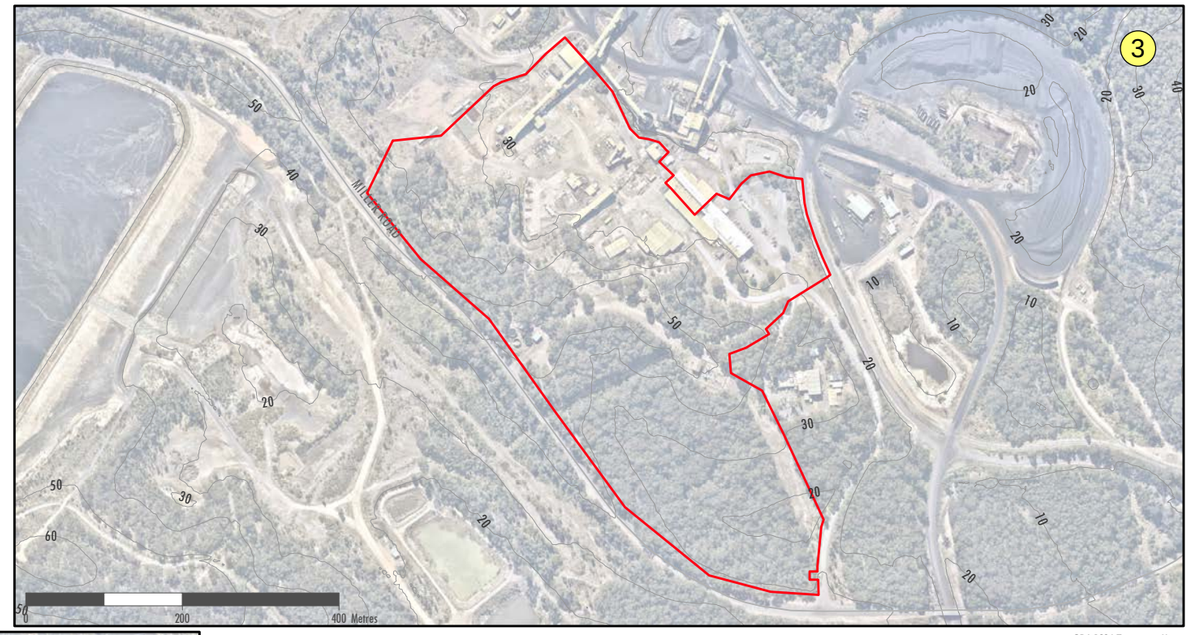
Date: _____

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umwelt







GDA 1994 Transverse Mercator

Legend

Project Assessment Area

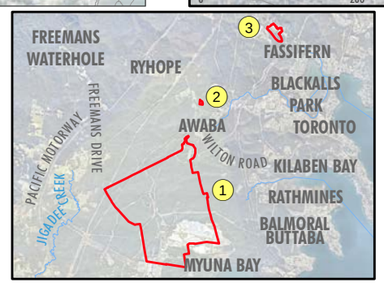


FIGURE 1

Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)

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360000 361000 362000 363000 364000

6346000 6345000 6344000 6343000 6342000 6341000

WILTON ROAD

WANGI ROAD

MYUNA BAY

1

Scale 1:25000 at A3

0 500 1,000 Metres

CESSNOCK ROAD

NULBRING STREET

2

0 125 250 Metres

MILLER ROAD

3

0 200 400 Metres

GDA 1994 Transverse Mercator

Legend

Project Assessment Area

Contour Range (mAHD)

0
0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
100-110
110-120

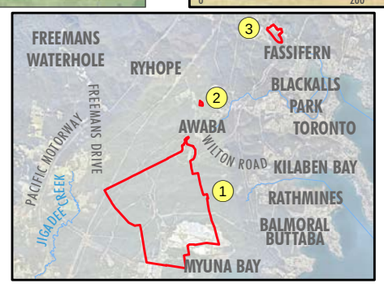
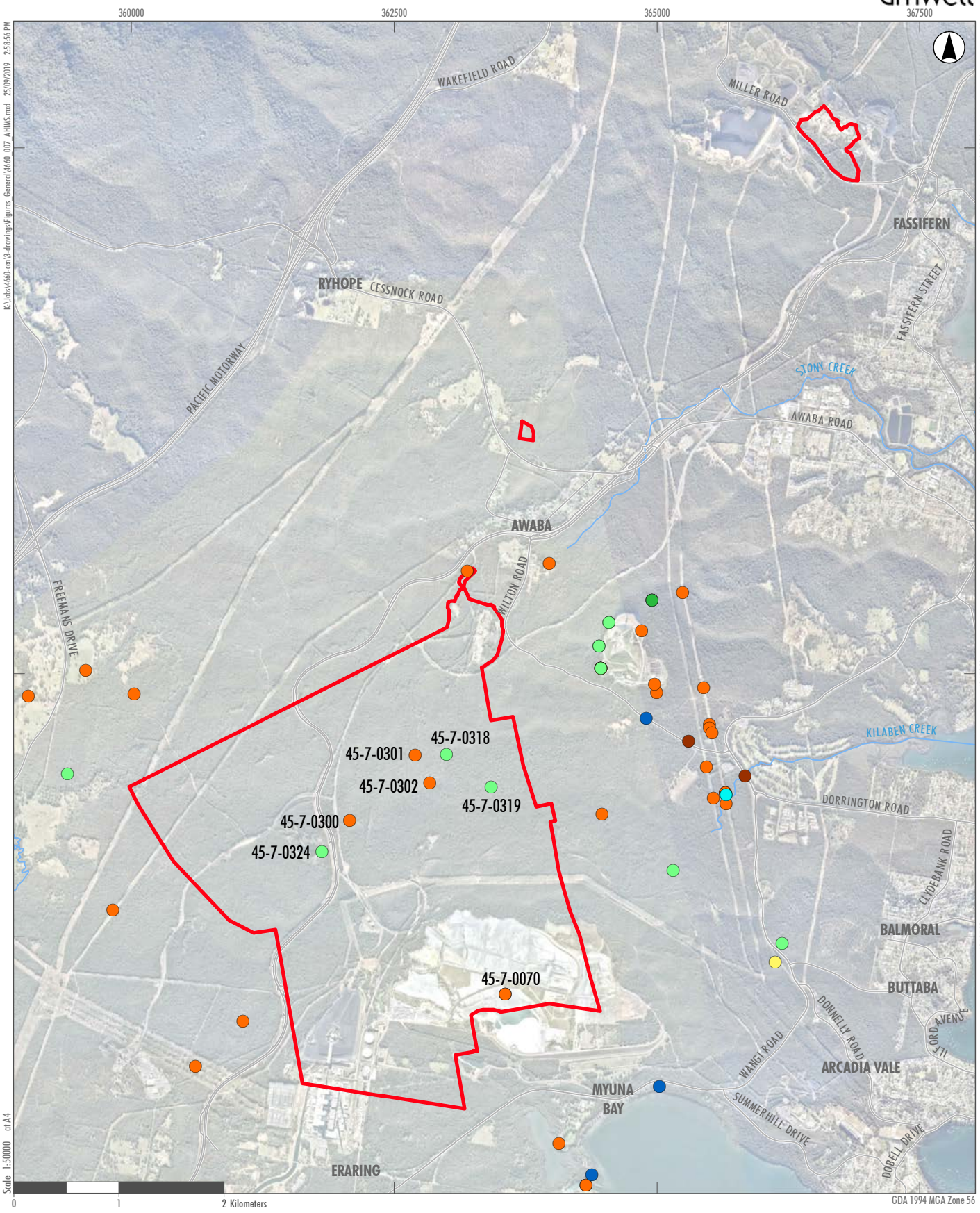


FIGURE 2

Topography of the Project Area

Image Source: Nearmap (July 2019) Data source: DSFI (2017)



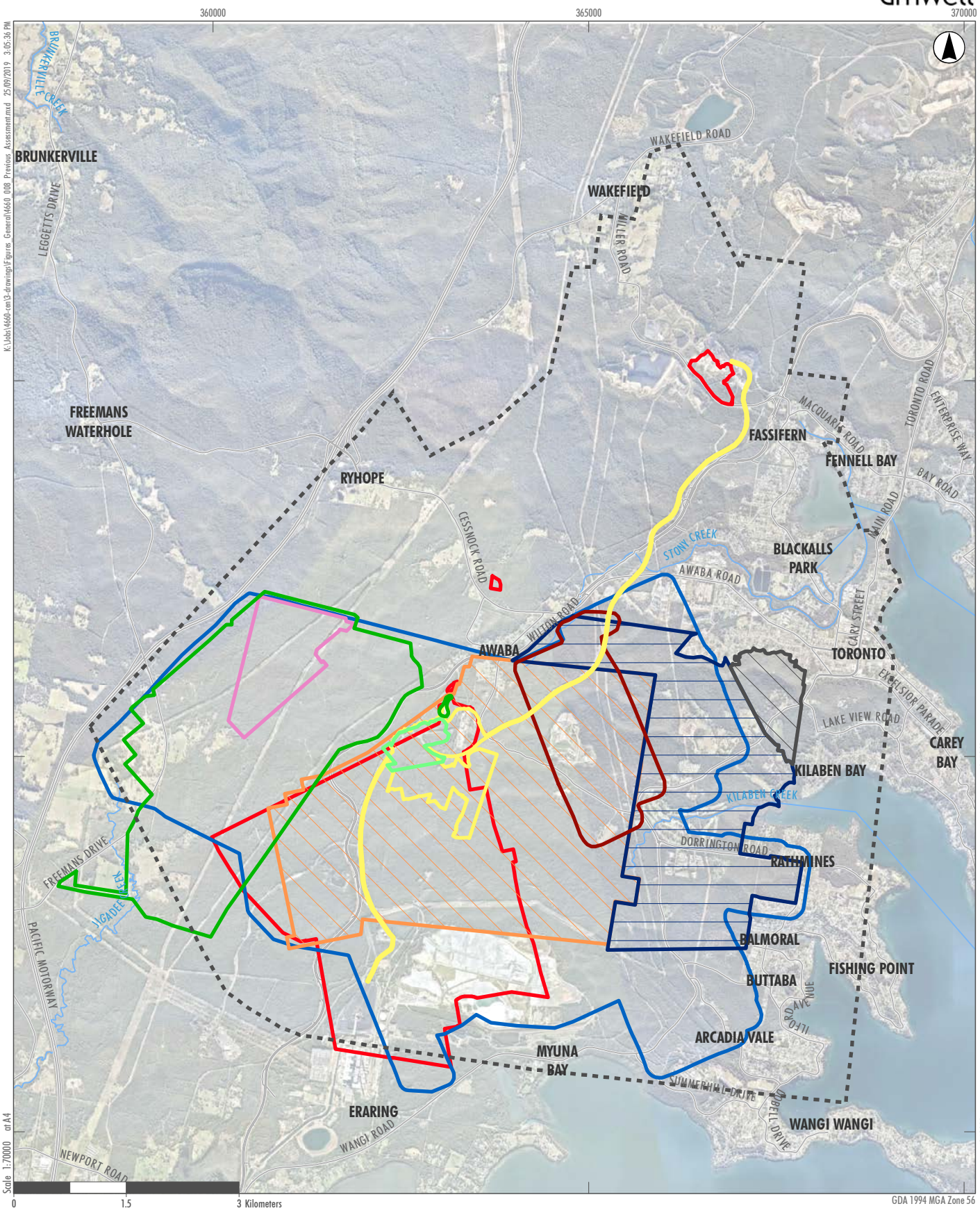
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- Project Assessment Area
- Aboriginal Ceremony and Dreaming
- Artefact
- Grinding Groove
- Habitation Structure
- Modified Tree (Carved or Scarred)
- Shell
- Potential Archaeological Deposit (PAD)
- Water Hole

FIGURE 3

AHIMS Sites

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



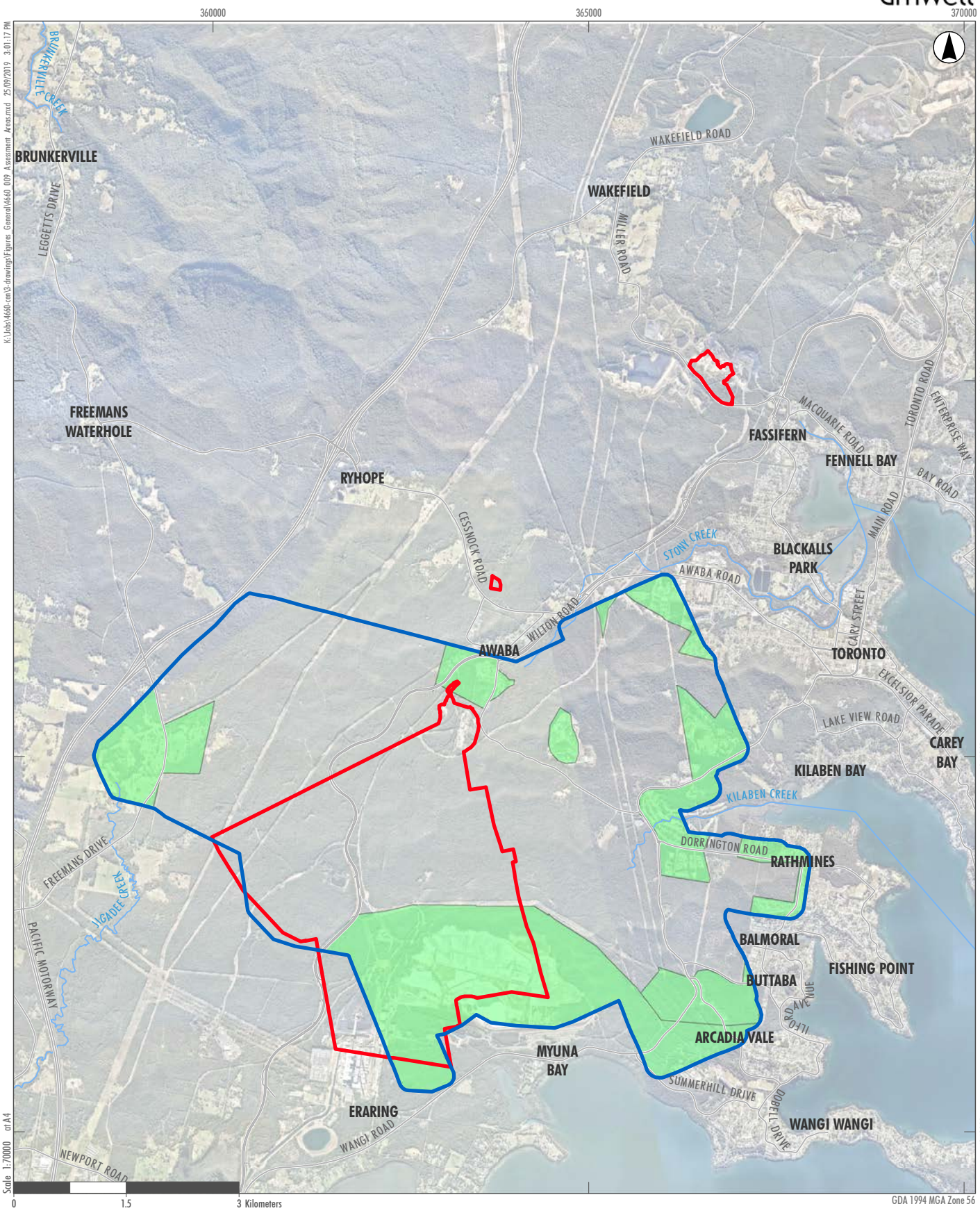
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- Project Assessment Area
- RPS 2013
- Harper Somers Osullivan REF Study Area Stage 1
- Harper Somers Osullivan REF Study Area Stage 2
- Harper Somers Osullivan REF Study Area Stage 2 Proposed Extension
- Indigenous Land Use Agreement Area of Agreement
- Newstan SEE AppH Apr07 Study Area
- RPS AWA404_AppA Revised Stage 3 SMP Area
- RPS Awaba Heritage Assessment Project Application Area
- RPS Heritage Impact Assessment Proposed Main West Project Area
- RPS NewstanSubsidence Management Plan 2012 Project Area

FIGURE 4

Previous Assessments

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)



Legend

- Project Assessment Area
- Surveyed Area
- Unsurveyed Area

FIGURE 5

Areas Surveyed By RPS 2013

Image Source: Nearmap (July 2019) Data source: RPS (2013), AHIMS (2019), DFSI (2017)

Jessica Blackman

From: Jessica Blackman
Sent: Tuesday, 29 October 2019 4:47 PM
Subject: Reminder: 4660 Newstan Mine Extension Project
Attachments: 4660_Methodology_20191029_reminder_ltr.pdf

Importance: High

Dear Registered Aboriginal Party Representatives,

This email is just a friendly reminder on the opportunity to respond to a draft Assessment Methodology and submit Expressions of Interest for commercial engagement in the Aboriginal Cultural Heritage Assessment (ACHA) for the Centennial Newstan Mine Extension Project.

This methodology was developed for **Umwelt project number 4660,** and was distributed for feedback/comment on 1 October 2019. Response to this methodology, **including Expressions of Interest/completed Archaeological Fieldwork Engagement Form with accompanying documentation**, is due by **5pm on 1 November 2019.**

Details for how to respond are shown below:

- Email responses can be made by replying to this email (jblackman@umwelt.com.au)
- Phone responses can be made by calling Jessica Blackman on 02 49505322 (Umwelt office) or 041230780 (mobile)

If you have already responded we thank you for your time and response. If you have not responded, but would like to, then please take this opportunity to submit your organisation's response. A copy of the original methodology letter provided, including the Archaeological Fieldwork Engagement Form, is attached above for your information.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

www.umwelt.com.au

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Please consider the environment before printing this email

Jessica Blackman

From: Ashley Williams <ceo@birabanlalc.com.au>
Sent: Wednesday, 30 October 2019 9:29 AM
To: Jessica Blackman
Subject: RE: Reminder: 4660 Newstan Mine Extension Project
Attachments: admin@birabanlalc.com.au_20190627_172654.pdf; CofC Business.pdf

Hi Jessica,

Please see attached Biraban LALC's Workers Compensation and Public Liability Insurance.
Please let me know if you require anything further.
Thank you

Kind Regards

Ashley Williams
Chief Executive Officer

Mob: 0422 288 537
Phone: (02) 4950 4806
Address**:** 9 Thorne Street, Toronto NSW 2283
(Monday, Tuesday, Wednesday & Friday)

BIRABAN
Local Aboriginal Land Council

I acknowledge and pay respect to Elders past and present and the traditional owners of the land we work.

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Wednesday, October 30, 2019 9:06 AM
To: Ashley Williams <ceo@birabanlalc.com.au>
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Thank you Ashley, I have noted your feedback on the methodology.

If you could provide us with your certificates of currency/insurance for the purpose of the EOI that would be very helpful.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

www.umwelt.com.au

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Please consider the environment before printing this email

From: Ashley Williams <ceo@birabanlalc.com.au>
Sent: Wednesday, 30 October 2019 8:55 AM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica,

Biraban LALC support the proposed assessment methodology for the Aboriginal Cultural Heritage Assessment for the Centennial Newstan Mine Extension Project and would like to submit our Expression of Interest for commercial engagement for this project.

If you require further information please do not hesitate in contacting me.
Thank you

Kind Regards

Ashley Williams
Chief Executive Officer

Mob: 0422 288 537
Phone: (02) 4950 4806
Address: 9 Thorne Street, Toronto NSW 2283
(Monday, Tuesday, Wednesday & Friday)

BIRABAN
Local Aboriginal Land Council

I acknowledge and pay respect to Elders past and present and the traditional owners of the land we work.

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Tuesday, October 29, 2019 4:47 PM
To: undisclosed-recipients:
Subject: Reminder: 4660 Newstan Mine Extension Project
Importance: High

Dear Registered Aboriginal Party Representatives,

This email is just a friendly reminder on the opportunity to respond to a draft Assessment Methodology and submit Expressions of Interest for commercial engagement in the Aboriginal Cultural Heritage Assessment (ACHA) for the Centennial Newstan Mine Extension Project.

This methodology was developed for **Umwelt project number 4660,** and was distributed for feedback/comment on 1 October 2019. Response to this methodology, **including Expressions of Interest/completed Archaeological Fieldwork Engagement Form with accompanying documentation**, is due by **5pm on 1 November 2019.**

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Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
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Please consider the environment before printing this email

Jessica Blackman

From: Iain Hornshaw <Iain.Hornshaw@centennialcoal.com.au>
Sent: Friday, 11 October 2019 9:40 AM
To: Jessica Blackman; Karyn Virgin
Subject: Fw: FIELDWORK ENGAGEMENT FORM

Hi Jessica and Karyn,

See below response from Corroboree.

Regards

Iain Hornshaw
Approvals Coordinator

p: +61 (0) 2 4935 8901 | m: +61 (0) 435 030 438

Centennial Coal Company Limited | Fassifern
100 Miller Road, Fassifern NSW 2283 Australia
centennialcoal.com.au

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----- Forwarded by Iain Hornshaw/CentennialCoal on 11/10/2019 09:36 AM -----

From: "Corroboree Aboringinal Corporation" <corroboreecorp@bigpond.com>
To: iain.hornshaw@centennialcoal.com.au
Cc: "Marilyn Carroll-Johnson" <corroboreecorp@bigpond.com>
Date: 08/10/2019 09:09 PM
Subject: Fwd: FIELDWORK ENGAGEMENT FORM

Hi Iain
Please refer engagement form, insurances and medical competency letter.
Kind regards
Marilyn Carroll-Johnson
Director
Corroboree Aboriginal Corporation
Mob: 0415911159
Ph: 0288244324
E: corroboreecorp@bigpond.com
Address: PO Box 3340
ROUSE HILL NSW 2155

Begin forwarded message:

From: Corroboree Aboringinal Corporation <corroboreecorp@bigpond.com>
Date: 2 October 2019 at 6:58:56 pm AEST

Subject: FIELDWORK ENGAGEMENT FORM

Hi Iain
Please refer Engagement Form.

Archaeological Fieldwork Engagement Form **Proposed Newstan Mine Extension Project, N**

To: Centennial Coal
Email: iain.hornshaw@centennialcoal.com.au
Phone: 4935 8901
Attention: Iain Hornshaw (Approvals Coordinator)

Item	**Response (circ detail)**
Nominated field work representative and representative contact phone number.	Name: Mike Phone: +61 42
Our organisation has certificates of currency demonstrating a minimum of $20,000 cover for workers compensation, public liability and product liability).	(Y) / N **Certificates of before engage**
Our organisation understands that payment terms and conditions are in accordance with those previous negotiated with Centennial, with a specified rate of pay of $1000 per Aboriginal organisation per day. Travel will be paid at ATO rates.	(Y) / N
Our organisation will provide their representative with appropriate Personal Protective Equipment and Clothing (PPE&C). As a minimum, this must include: • Long trousers	(Y) / N

Item	Response (c detail)
Our representative will commit to arrive on site on time and free from the effects of drugs, alcohol and fatigue (noting that your representative may be required to undergo drug and alcohol testing in accordance with site requirements).	Y / N
Our representative will commit to behaving in a culturally appropriate manner whilst on site and will work collaboratively with the archaeologist and other Aboriginal parties (where relevant)	Y / N

Organisation: Corroboree Aboriginal Corpo

Name of Authorised Person: Marilyn Carroll-Johnson

Signature: Marilyn Carroll-Johnson

Date: 2 October 2019

icare
workers
insurance

of

Marilyn Johnson
CORROBOREE ABORIGINAL
CORPORATION
PO Box 3340
ROUSE HILL NSW 2155

Dear Marilyn

statement of coverage

The following policy of insurance covers the full amount of the employer's liability under the *Workers Compensation Act 1987 (NSW).*

policy number
125864701

legal name
CORROBOREE ABORIC

trading name
Corroboree Aboriginal Corporation

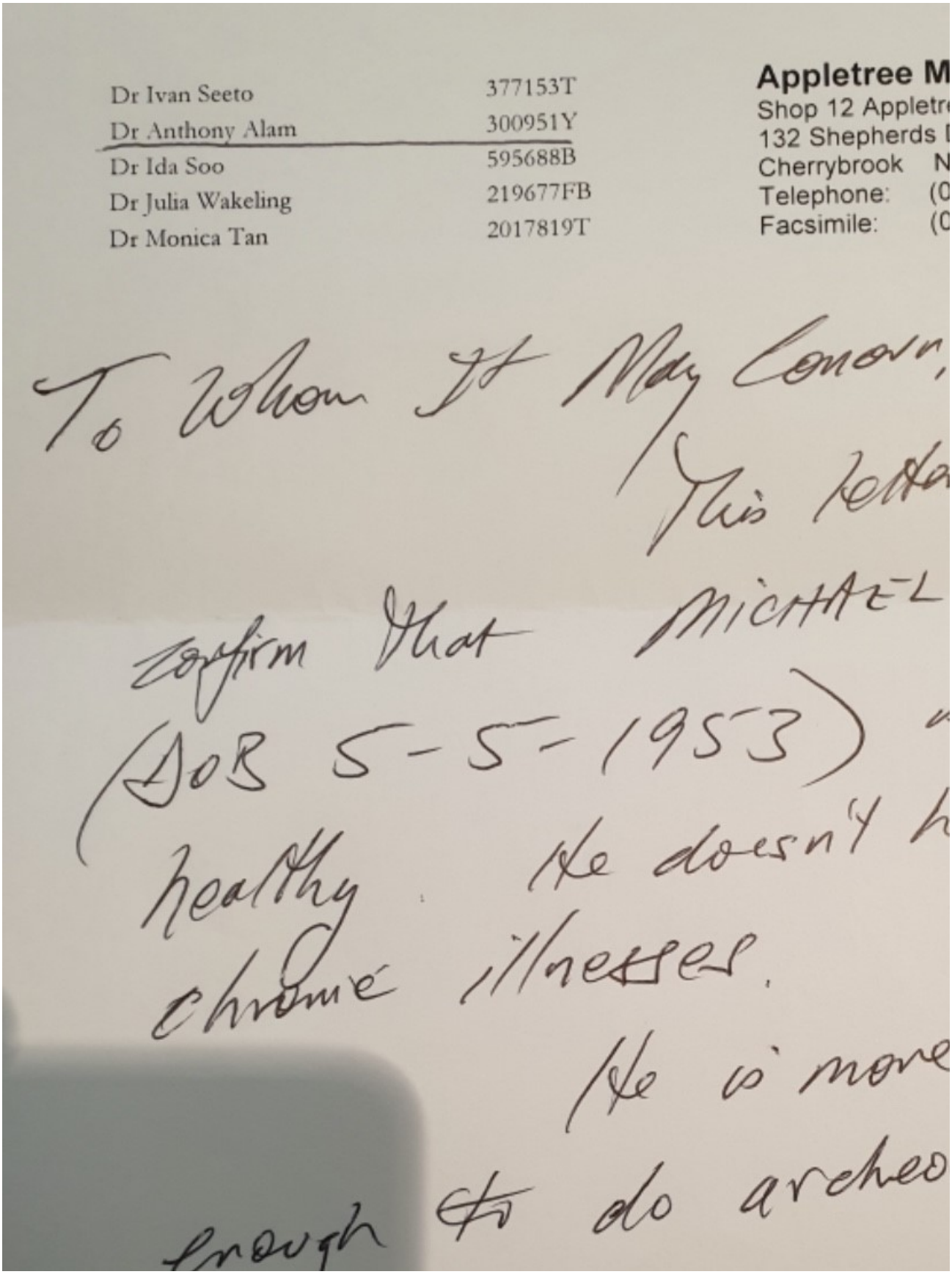
abn
17 569 793 106

industry classification number (WIC)
782920 Technical Services nec

nu
w

* Number of workers includes contractors/deemed workers


9:53
Done GIO Mobile Business Prote
Enquiries: 13
Claims: 13
gio.com.au
Corroboree Aboriginal Corporation
PO Box 3340
Rouse Hill NSW 2155
Policy numbe
Certificate of Currency
Insured details
Insured:
Corroboree Aboriginal Corporation
ABN 17 569 793 106
Period of insurance:
22 September 2019 to 4:00pm 22 S
Business description:
Surveying and Mapping Services
Your Cover
Public and products liability
Public liability
Products liability
Property in Your Custody or Control sum insured
Professional indemnity
Not Taken
Portable and valuable items
Not Taken



Dr Ivan Seeto	377153T
Dr Anthony Alam	300951Y
Dr Ida Soo	595688B
Dr Julia Wakeling	219677FB
Dr Monica Tan	2017819T

Appletree M
Shop 12 Appletr
132 Shepherds
Cherrybrook N
Telephone: (0
Facsimile: (0

To Whom It May Concern,

This letter

confirm that MICHAEL

(DOB 5-5-1953) is

healthy. He doesn't h

chronic illnesses.

He is more

enough to do arched

Kind regards
Marilyn Carroll-Johnson
Director
Corroboree Aboriginal Corporation
Mob: 0415911159
Ph: 0288244324
E: corroboreecorp@bigpond.com

Address: PO Box 3340
ROUSE HILL NSW 2155

Jessica Blackman

From: Kathy Down
Sent: Friday, 4 October 2019 7:27 AM
To: Karyn Virgin; Nicola Roche; Jessica Blackman
Subject: FW: 4660 - Proposed Newstan Mine Extension Project, NSW - INSURANCES

Another email response for 4660.
Thanks!
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

www.umwelt.com.au

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Please consider the environment before printing this email

From: Corroboree Aboringinal Corporation <corroboreecorp@bigpond.com>
Sent: Wednesday, 2 October 2019 5:50 PM
To: Kathy Down <Kdown@umwelt.com.au>
Subject: Re: 4660 - Proposed Newstan Mine Extension Project, NSW - INSURANCES

Hi Kathy

icare
workers
insurance

of

Marilyn Johnson
CORROBOREE ABORIGINAL
CORPORATION
PO Box 3340
ROUSE HILL NSW 2155

Dear Marilyn

statement of coverage

The following policy of insurance covers the full amount of the employer's liability under the *Workers Compensation Act 1987 (NSW)*.

policy number
125864701

legal name
CORROBOREE ABORIC

trading name
Corroboree Aboriginal Corporation

abn
17 569 793 106

industry classification number (WIC)
782920 Technical Services nec

nu
w

* Number of workers includes contractors/deemed workers



Kind regards
Marilyn Carroll-Johnson
Director
Corroboree Aboriginal Corporation
Mob: 0415911159
Ph: 0288244324
E: corroboreecorp@bigpond.com
Address: PO Box 3340

ROUSE HILL NSW 2155

On 1 Oct 2019, at 2:42 pm, Kathy Down <Kdown@umwelt.com.au> wrote:

Hi

The attached letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322
Email: kvirgin@umwelt.com.au

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Regards

Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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Please consider the environment before printing this email

<4660_Methodology_20191001a_ltr1136.pdf>

Jessica Blackman

From: Jessica Blackman
Sent: Thursday, 31 October 2019 8:03 AM
To: Deidre Perkins
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Good morning Deidre!

You have previously registered for consultation but I have not received a completed EOI form for commercial engagement of fieldwork 😊 if you wish to submit an EOI, they're due by COB tomorrow afternoon.

Cheers,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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From: Deidre Perkins <dedemaree3@hotmail.com>
Sent: Wednesday, 30 October 2019 9:50 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: Reminder: 4660 Newstan Mine Extension Project

Hi Jess,
Have I expressed my interest in this project?
Deidre

Get Outlook for Android

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Tuesday, October 29, 2019 4:47:22 PM
Subject: Reminder: 4660 Newstan Mine Extension Project

Dear Registered Aboriginal Party Representatives,

This email is just a friendly reminder on the opportunity to respond to a draft Assessment Methodology and submit Expressions of Interest for commercial engagement in the Aboriginal Cultural Heritage Assessment (ACHA) for the Centennial Newstan Mine Extension Project.

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Regards,

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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Mob: 0412 350 780

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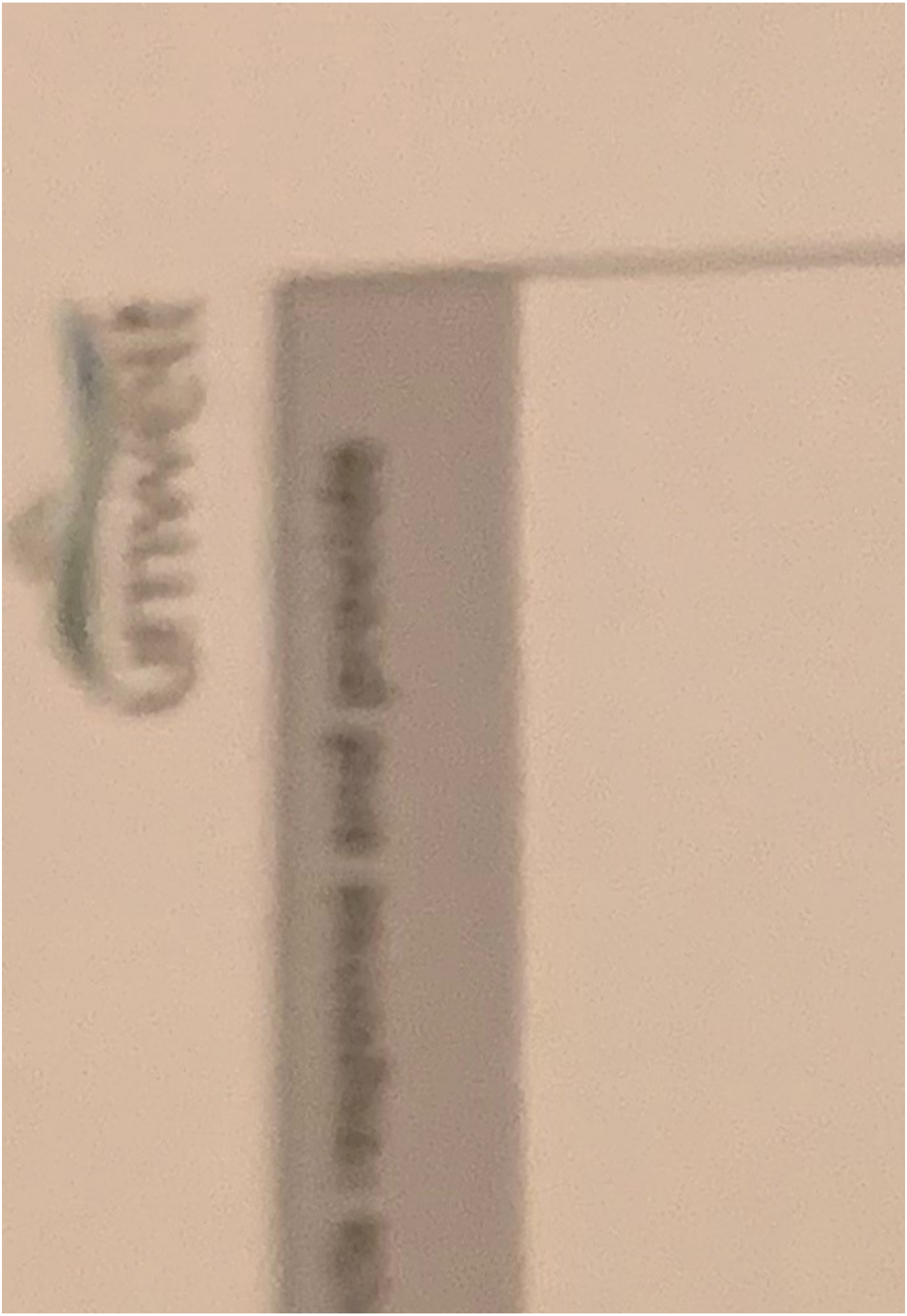
Jessica Blackman

From: lilly carroll <didgengunawalclan@yahoo.com.au>
Sent: Thursday, 31 October 2019 8:51 PM
To: Jessica Blackman
Subject: Re: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica

I've tried to send this paperwork to Iain but the email I have it keeps bouncing back could you please pass this on

Kind regards DNC
0426823944



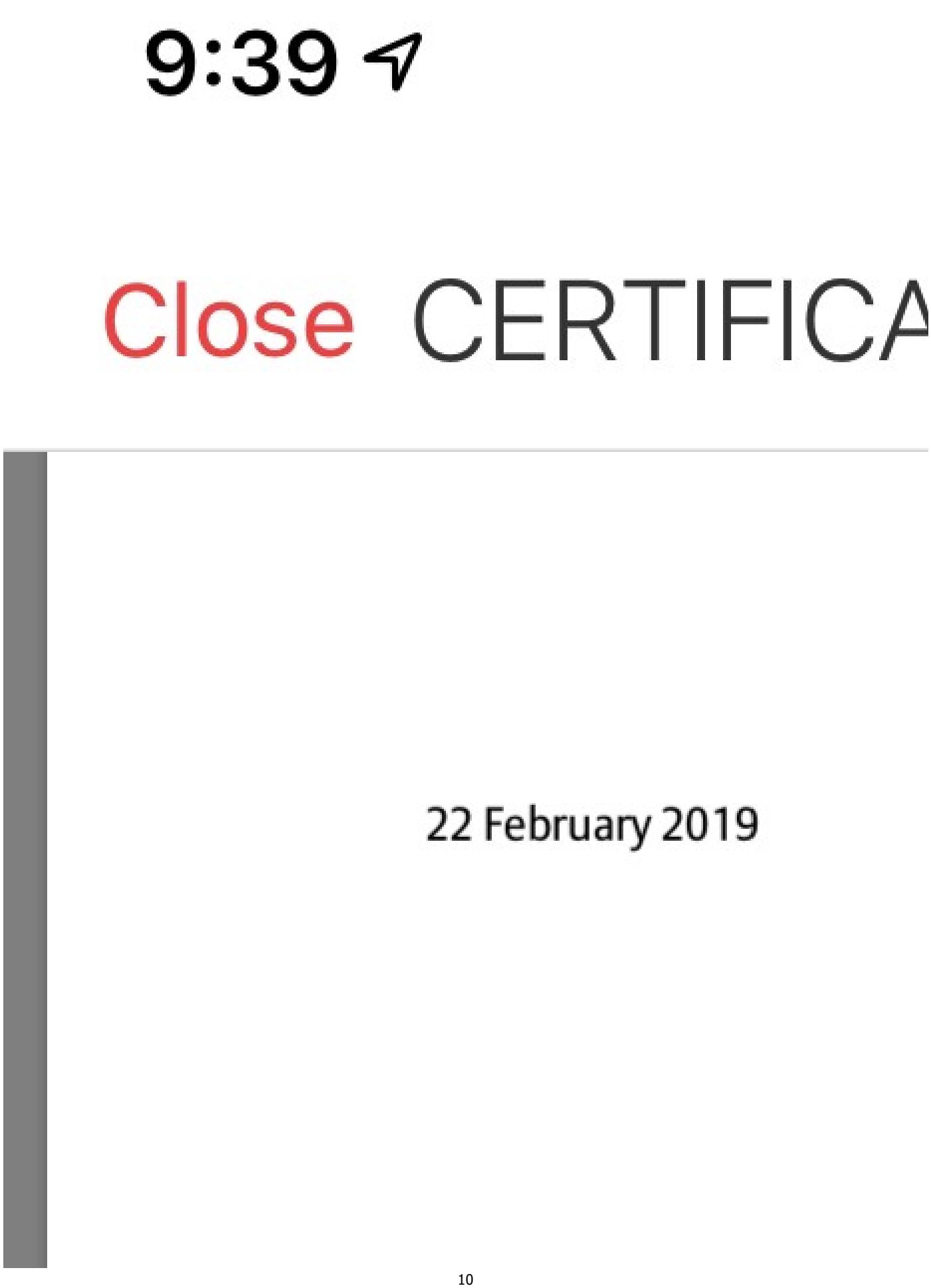
Dr Neamat Ibrahim
MA Hons, AMC, FRACGP, FACRRM.
Provider No. 223054DY
23-27 First Avenue
BLACKTOWN NSW 2148

9:41

Archive **Workers**

icare™
workers
insurance

Paul Boyd
DIDGE NGUNAWAL CLAN ABORIGINAL
7 Sickin Street


9:39
Close CERTIFICA
22 February 2019

Sent from Yahoo Mail for iPhone

On Thursday, October 31, 2019, 8:26 pm, lilly carroll <didgengunawalclan@yahoo.com.au> wrote:

Hi Jessica,

DNC hopes to go-ahead with the methodology/ survey for the Newstan Min extension project

Sent from Yahoo Mail for iPhone

On Tuesday, October 29, 2019, 4:47 pm, Jessica Blackman <jblackman@umwelt.com.au> wrote:

Dear Registered Aboriginal Party Representatives,

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Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

Mob: 0412 350 780

www.umwelt.com.au

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Wednesday, 9 October 2019 9:15 AM
To: 'l.perry@optusnet.com.au'
Cc: Karyn Virgin
Subject: 4660
Attachments: 4660_Methodology_20191008a_ltr_rs.pdf

Good morning Laurie,

The attached letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the proposed Newstan Mine Extension Project. In accordance with the consultation requirements (DECCW, 2010) we ask that your group provides comments on the draft methodology by no later than close of business **4 November 2019.** Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322
Email: kvirgin@umwelt.com.au

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Regards

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

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Mob: 0412 350 780

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Wednesday, 30 October 2019 8:15 AM
To: Laurie Perry
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Thank you Laurie. If you could also provide us with the documentation we need to engage you, such as the archaeological fieldwork form and certificates, that would be great.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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From: Laurie Perry <l.perry@optusnet.com.au>
Sent: Wednesday, 30 October 2019 8:14 AM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica

Thank you....I will let you know if we are sending someone out their

cheers

Laurie Perry
CEO - Wonnarua Nation Aboriginal Corporation
Ground Floor 254 John St Singleton NSW
PO BOX 3066
Singleton Delivery Centre 2330
Ph : (02) 6571 8595
Fax : (02) 6545 2099
Mob : 0412 593 020
enquiries@wonnarua.org.au

l.perry@optusnet.com.au
www.wonnarua.org.au

From: Jessica Blackman [mailto:jblackman@umwelt.com.au]
Sent: Tuesday, 29 October 2019 4:47 PM
Subject: Reminder: 4660 Newstan Mine Extension Project
Importance: High

Dear Registered Aboriginal Party Representatives,

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- Email responses can be made by replying to this email (jblackman@umwelt.com.au)
- Phone responses can be made by calling Jessica Blackman on 02 49505322 (Umwelt office) or 041230780 (mobile)

If you have already responded we thank you for your time and response. If you have not responded, but would like to, then please take this opportunity to submit your organisation's response. A copy of the original methodology letter provided, including the Archaeological Fieldwork Engagement Form, is attached above for your information.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

www.umwelt.com.au

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Jessica Blackman

From: Laurie Perry <l.perry@optusnet.com.au>
Sent: Monday, 11 November 2019 6:29 AM
To: Jessica Blackman; gillane@bigpond.com; 'Craig Smith'; Karyn Virgin
Subject: FW: 4660 Centennial Coal Newstan Mine Expansion project
Attachments: Newstan mine extension project.pdf; WNAC icare Certificate of Currency.pdf; WNAC P&LCertificate of Currency.pdf; WNAC WORKERS COMP WTA050557483122 _CoC.pdf

Hi Jessica or Karyn

I have included Rene my cousin and Craig our bookkeeper in this reply for proposed upcoming work at Newstan mine at Fassifern.

If successful Rene can do this work and Craig will do the invoicing

cheers

Laurie Perry
CEO - Wonnarua Nation Aboriginal Corporation
Ground Floor 254 John St Singleton NSW
PO BOX 3066
Singleton Delivery Centre 2330
Ph : (02) 6571 8595
Fax : (02) 6545 2099
Mob : 0412 593 020
enquiries@wonnarua.org.au
l.perry@optusnet.com.au
www.wonnarua.org.au

From: Laurie Perry
Sent: Friday, 8 November 2019 4:52 PM
To: 'Jessica Blackman' <jblackman@umwelt.com.au>
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Hi Jessica

Sorry for being late

cheers

Laurie Perry
CEO - Wonnarua Nation Aboriginal Corporation
Ground Floor 254 John St Singleton NSW
PO BOX 3066
Singleton Delivery Centre 2330
Ph : (02) 6571 8595
Fax : (02) 6545 2099
Mob : 0412 593 020
enquiries@wonnarua.org.au

l.perry@optusnet.com.au
www.wonnarua.org.au

From: Jessica Blackman
Sent: Thursday, 7 November 2019 11:25 AM
To: Laurie Perry <l.perry@optusnet.com.au>
Subject: 4660 Centennial Coal Newstan Mine Expansion project
Importance: High

Good morning Laurie,

As discussed on the phone earlier I was just touching base around fieldwork availability for your group, as we are trying to lock this in ASAP. Can you please advise if you will be able to provide personnel in the weeks of the **25th November and 2nd December**, and which, if any of these weeks suits best?

Secondly can you please complete and send back to me your expression of interest documentation as I need this to be able to continue with the engagement process. I will be on leave tomorrow so if you could possibly supply this by COB today that would be greatly appreciated.

Please feel free to call me if you wish to discuss further.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Wednesday, 30 October 2019 10:04 AM
To: lilly carroll
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Good morning Lilly, thank you for your email.

If you could complete the EOI form and provide the necessary documentation that would be fabulous. I have noted your interest in engagement and no objections to the methodology.

Have a great day!

Regards,

Jessica Blackman
Senior Archaeologist

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75 York Street
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Please consider the environment before printing this email

From: lilly carroll <didgengunawalclan@yahoo.com.au>
Sent: Tuesday, 29 October 2019 10:58 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica,

DNC hopes to go-ahead with the methodology/ survey for the Newstan Min extension project

Kind regards DNC
Paul Boyd
0426823944

Sent from Yahoo Mail for iPhone

On Tuesday, October 29, 2019, 4:47 pm, Jessica Blackman <jblackman@umwelt.com.au> wrote:

Dear Registered Aboriginal Party Representatives,

This email is just a friendly reminder on the opportunity to respond to a draft Assessment Methodology and submit Expressions of Interest for commercial engagement in the Aboriginal Cultural Heritage Assessment (ACHA) for the Centennial Newstan Mine Extension Project.

This methodology was developed for **Umwelt project number 4660,** and was distributed for feedback/comment on 1 October 2019. Response to this methodology, **including Expressions of Interest/completed Archaeological Fieldwork Engagement Form with accompanying documentation**, is due by **5pm on 1 November 2019.**

Details for how to respond are shown below:

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- Phone responses can be made by calling Jessica Blackman on 02 49505322 (Umwelt office) or 041230780 (mobile)

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Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

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Mob: 0412 350 780

www.umwelt.com.au

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Please consider the environment before printing this email

Jessica Blackman

From: Kathy Down
Sent: Friday, 4 October 2019 2:03 PM
To: Jessica Blackman; Nicola Roche
Subject: FW: 4660 - Proposed Newstan Mine Extension Project, NSW

Hi Jess and Nic
Response from Ryan Johnson re 4660.
Thanks!
Kath

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

www.umwelt.com.au

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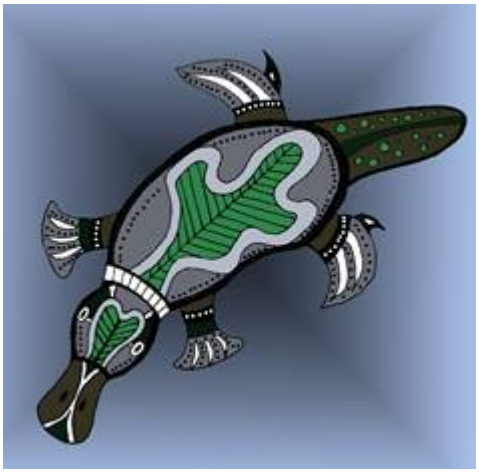
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Please consider the environment before printing this email

From: Ryan Johnson <murrabidgeemullangari@yahoo.com.au>
Sent: Friday, 4 October 2019 2:01 PM
To: Kathy Down <Kdown@umwelt.com.au>
Subject: RE: 4660 - Proposed Newstan Mine Extension Project, NSW

Dear Kathy
I have read the project information and proposed methodology for the above project, I endorse the recommendations made by Umwelt
Kind regards
Ryan Johnson | **Murra Bidgee Mullangari**
0475565517



Aboriginal Corporation Cultural Heritage

A: PO Box 246, Seven Hills, NSW, 2147
E: murrabidgeemullangari@yahoo.com.au
ICN: 8112

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From: Kathy Down [mailto:Kdown@umwelt.com.au]
Sent: Tuesday, 1 October 2019 2:52 PM
To: 'murrabidgeemullangari@yahoo.com.au' <murrabidgeemullangari@yahoo.com.au>
Cc: Jessica Blackman <jblackman@umwelt.com.au>; Nicola Roche <nroche@umwelt.com.au>
Subject: 4660 - Proposed Newstan Mine Extension Project, NSW

Hi

The attached letter provides details of the proposed methodology for an Aboriginal Cultural Heritage Assessment associated with the Project. In accordance with the consultation requirements (DECCW 2010), we ask that your group provides comments on the draft methodology by no later than close of business **1 November 2019**. Comments regarding the draft methodology can be provided verbally or in writing to:

Karyn Virgin
Senior Archaeologist
Umwelt Environmental and Social Consultants (Umwelt)
Phone: 02 4950 5322
Email: kvirgin@umwelt.com.au

Should you require any further information or wish to discuss any aspect of the Project, please do not hesitate to contact Karyn or Centennial's Iain Hornshaw (Approvals Coordinator) on 4935 8901 / iain.hornshaw@centennialcoal.com.au.

Regards

Kh

Kathy Down
Senior Project Administrator

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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Jessica Blackman

From: Jessica Blackman
Sent: Friday, 1 November 2019 4:40 PM
To: Tamara Towers
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Hi Tamara,

Yes I will put you down as a verbal EOI for now, thanks 😊

Cheers,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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Please consider the environment before printing this email

From: Tamara Towers <worimiacs@gmail.com>
Sent: Friday, 1 November 2019 4:32 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica

I'm having a bit of trouble with my printer, am I able to send that over to you tomorrow please.

Regards Tamara Towers

On Fri, 1 Nov 2019 at 3:20 pm, Jessica Blackman <jblackman@umwelt.com.au> wrote:

> Hi Tamara,
>
> In order to have you considered for commercial engagement on this project I require the Archaeological fieldwork form to be completed and sent back to me with accompanying documentation for insurances.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

Mob: 0412 350 780

www.umwelt.com.au

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Please consider the environment before printing this email

From: Tamara Towers <worimiacs@gmail.com>
Sent: Friday, 1 November 2019 1:45 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: Reminder: 4660 Newstan Mine Extension Project

Hi Jennifer,

I'm not sure who will be the sight officer for the day it will be either myself

Candy Towers

Or Darcy Dole

We do agree to everything though.

Thanks Jennifer

Regards

Tamara Towers

On Fri, 1 Nov 2019 at 1:12 pm, Jessica Blackman <jblackman@umwelt.com.au> wrote:

Thank you Tamara for your email and agreeance with the methodology.

If your company would like to express interest in being commercially engaged for this work, could you please complete and return to me the Archaeological Fieldwork Form attached to the methodology that was sent out by COB business today? We require this documentation in order to proceed with expressions of interest for commercial engagement.

Thank you very much!

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

Mob: 0412 350 780

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Please consider the environment before printing this email

From: Tamara Towers <worimiacs@gmail.com>
Sent: Friday, 1 November 2019 12:39 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica,

On behalf of Worimi Aboriginal Cultural services, I accept and agree with the methodology and ACHA for the Newstan Mine Extension project.

This area is culturally significant to my people.

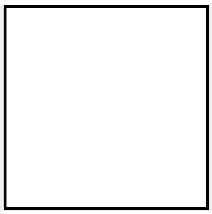
Please find attached certificate of currency.

Thanks Jessica looking forward to hearing from you soon.

Regards

Tamara Towers

0402360356



Certificate of Currency.pdf

On Tue, 29 Oct 2019 at 4:47 pm, Jessica Blackman <jblackman@umwelt.com.au> wrote:

> Dear Registered Aboriginal Party Representatives,
>
> This email is just a friendly reminder on the opportunity to respond to a draft Assessment Methodology and submit Expressions of Interest for commercial engagement in the Aboriginal Cultural Heritage Assessment (ACHA) for the Centennial Newstan Mine Extension Project.
>
> This methodology was developed for **Umwelt project number 4660,** and was distributed for feedback/comment on 1 October 2019. Response to this methodology, **including Expressions of Interest/completed Archaeological Fieldwork Engagement Form with accompanying documentation**, is due by **5pm on 1 November 2019.**

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- Phone responses can be made by calling Jessica Blackman on 02 49505322 (Umwelt office) or 041230780 (mobile)

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Regards,

Jessica Blackman
Senior Archaeologist

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Jessica Blackman

From: WIDESCOPE . <widescope.group@live.com>
Sent: Wednesday, 30 October 2019 11:56 AM
To: iain.hornshaw@centennialcoal.com.au
Cc: Jessica Blackman
Subject: Archaeological Fieldwork Engagement Form Proposed Newstan Mine Extension Project, NSW
Attachments: 4660 Newstan Mine Site Officer Application.pdf; WIG Public Liability Insurance 2019.2020 .pdf; WIG Workers Comp 2019-2020.jpg

Attention: Iain Hornshaw (Approvals Coordinator)

Hi,

Please see attached site officer form and relevant insurance

PN: Fit for work Cert to follow

Regards
Steven Hickey

Jessica Blackman

From: Kym Ruhan
Sent: Monday, 4 November 2019 3:47 PM
To: Jessica Blackman
Subject: 1001 - Phone Call

Hi Jess

Arthur Fletcher called to say he is supportive and gives his verbal agreement
Please call him if needed
Ph: 0439 420 897

Thanks

Kym Ruhan
Administrative Assistant

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Sunday, 24 November 2019 4:10 PM
To: Kerrie Brauer
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Hi Kerrie,

Thank you for your below email- I am currently away on fieldwork but will forward it to Karyn who may be able to address ATOAC's comments on the methodology.

Have a great afternoon!

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
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Teralba, NSW 2284

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Please consider the environment before printing this email

From: Kerrie Brauer <kerrie@awabakal.com.au>
Sent: Friday, 22 November 2019 6:47 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica,

Please find attached our Archaeological Fieldwork Engagement Form.

The medical that was undertaken for Centennial Coal has been emailed directly from the doctors where the medical was performed. The medical forms were directly emailed to stella.hardas@centenialcoal.com.au.

With regards to the proposed Methodology, I agree with the Methodology for the Aboriginal Cultural Heritage and Archaeological Assessment within section 4.0.

With regards to the previous investigations, I am concerned with the statement that: "*the survey was undertaken over 6 years ago and no detailed survey data is available*" and wondering why Centennial Coal would not have copies of this data.

I'm not sure what information you are requiring, and just wanted to let you know that both ATOAC and ADTOAC were involved with previous surveys with Eraring Power Station and associated ash dam and Newstan, and if I can help in any way just let me know.

If you require any further information please do not hesitate in contacting me.

Kind regards,
Kerrie Brauer

ATOAC
Kerrie Brauer | Director | Administration | Awabakal Traditional Owners Aboriginal Corporation
M: 04 12 86 63 57 | E: kerrie@awabakal.com.au | www.awabakal.com.au
PO Box 122 Rutherford NSW 2320 Australia

,

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From: Jessica Blackman [mailto:jblackman@umwelt.com.au]
Sent: Tuesday, 29 October 2019 4:47 PM
Subject: Reminder: 4660 Newstan Mine Extension Project
Importance: High

Dear Registered Aboriginal Party Representatives,

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Regards,

Jessica Blackman
Senior Archaeologist

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Thursday, 7 November 2019 11:04 AM
To: PeterLeven
Subject: 4660 Centennial Coal Newstan Mine Expansion Project

Importance: High

Good morning Peter,

I was hoping to get an indication from you of ADTOAC's availability to participate in the field assessment for Newstan Mine in the weeks of the 25th November and 2nd December- If you could let me know as soon as possible that would be greatly appreciated as we need to begin locking in dates for this work with this busy period coming up.

Please feel free to call me if you wish to discuss further- I will likely try calling you again this afternoon.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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Jessica Blackman

From: Jessica Blackman
Sent: Monday, 11 November 2019 2:56 PM
To: PeterLeven; Tracey.howie@wannangini.org; Kerrie Brauer
Cc: Karyn Virgin
Subject: 4660 Centennial Coal contractor surface medical
Attachments: Contractor Surface Medical.pdf

Good afternoon all,

Please find attached a copy of the contractor surface medical that is required for engagement in the Newstan Mine fieldwork. This medical can be completed by your regular GP.

If you have any questions or issues please don't hesitate to contact myself or Karyn.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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Jessica Blackman

From: Jessica Blackman
Sent: Thursday, 7 November 2019 11:19 AM
To: Ashley Williams
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Importance: High

Good morning Ashley,

I just wanted to touch base regarding this project and ask if you could please supply the Expression of interest form that was included in the methodology, for engagement for fieldwork- I note you have sent me your insurances already so I do not need them again. If you could supply this by COB today that would be greatly appreciated.

Secondly, can you please advise on BLALC's availability in the weeks of the **25th November and 2nd December** for potential fieldwork dates? We need to begin locking in this work with the upcoming busy season and so if you could let me know which of these weeks, if any, works best for the BLALC?

Please feel free to call or email me if you have any comments or questions. I will try calling you again later today.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
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Please consider the environment before printing this email

From: Ashley Williams <ceo@birabanlalc.com.au>
Sent: Wednesday, 30 October 2019 9:29 AM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica,

Please see attached Biraban LALC's Workers Compensation and Public Liability Insurance.
Please let me know if you require anything further.
Thank you

Kind Regards

Ashley Williams
Chief Executive Officer

Mob: 0422 288 537
Phone: (02) 4950 4806
Address: 9 Thorne Street, Toronto NSW 2283
(Monday, Tuesday, Wednesday & Friday)

BIRABAN
Local Aboriginal Land Council

I acknowledge and pay respect to Elders past and present and the traditional owners of the land we work.

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Wednesday, October 30, 2019 9:06 AM
To: Ashley Williams <ceo@birabanlalc.com.au>
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Thank you Ashley, I have noted your feedback on the methodology.

If you could provide us with your certificates of currency/insurance for the purpose of the EOI that would be very helpful.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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Please consider the environment before printing this email

From: Ashley Williams <ceo@birabanlalc.com.au>
Sent: Wednesday, 30 October 2019 8:55 AM

To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica,

Biraban LALC support the proposed assessment methodology for the Aboriginal Cultural Heritage Assessment for the Centennial Newstan Mine Extension Project and would like to submit our Expression of Interest for commercial engagement for this project.

If you require further information please do not hesitate in contacting me.
Thank you

Kind Regards

Ashley Williams
Chief Executive Officer

Mob: 0422 288 537
Phone: (02) 4950 4806
Address**:** 9 Thorne Street, Toronto NSW 2283
(Monday, Tuesday, Wednesday & Friday)

BIRABAN
Local Aboriginal Land Council

I acknowledge and pay respect to Elders past and present and the traditional owners of the land we work.

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Tuesday, October 29, 2019 4:47 PM
To: undisclosed-recipients:
Subject: Reminder: 4660 Newstan Mine Extension Project
Importance: High

Dear Registered Aboriginal Party Representatives,

This email is just a friendly reminder on the opportunity to respond to a draft Assessment Methodology and submit Expressions of Interest for commercial engagement in the Aboriginal Cultural Heritage Assessment (ACHA) for the Centennial Newstan Mine Extension Project.

This methodology was developed for **Umwelt project number 4660,** and was distributed for feedback/comment on 1 October 2019. Response to this methodology, **including Expressions of Interest/completed Archaeological Fieldwork Engagement Form with accompanying documentation**, is due by **5pm on 1 November 2019.**

Details for how to respond are shown below:

- Email responses can be made by replying to this email (jblackman@umwelt.com.au)
- Phone responses can be made by calling Jessica Blackman on 02 49505322 (Umwelt office) or 041230780 (mobile)

If you have already responded we thank you for your time and response. If you have not responded, but would like to, then please take this opportunity to submit your organisation's response. A copy of the original methodology letter provided, including the Archaeological Fieldwork Engagement Form, is attached above for your information.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
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Teralba, NSW 2284

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Mob: 0412 350 780

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Jessica Blackman

From: Ashley Williams <ceo@birabanlalc.com.au>
Sent: Tuesday, 26 November 2019 4:18 PM
To: Jessica Blackman
Subject: RE: 4660 Newstan Mine Extension survey

Hi Jessica,

Biraban LALC only received the Medical form on Friday the 22/11/2019 and the closing date was Sunday the 24/11/2019. This was not enough time for my sites officer to get the medical completed as it was the weekend and I request an extension for this to allow sufficient time for this to be completed.
I do apologise that this may cause some inconvenience however it was not achieveable for them to have this completed over the weekend.
They have been provided the forms and have assured me that they will be completed by a medical practioner as soon as they can get an available appointment.

Thank you

Kind Regards

Ashley Williams
Chief Executive Officer

Mob: 0422 288 537
Phone: (02) 4950 4806
Address**:** 9 Thorne Street, Toronto NSW 2283
(Monday, Tuesday, Wednesday & Friday)

BIRABAN
Local Aboriginal Land Council

I acknowledge and pay respect to Elders past and present and the traditional owners of the land we work.

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Friday, November 22, 2019 1:33 PM
To: undisclosed-recipients:
Subject: 4660 Newstan Mine Extension survey
Importance: High

Good afternoon all,

If you have not yet provided your completed medical for the upcoming Newstan Mine inductions and fieldwork, can you please do so by **COB Sunday the 24th November**, as this information is required in order to raise purchase orders with site for commercial engagement. After this time, if we do not have a completed medical, we will not be able to continue with commercial engagement, however, you will still be welcome to attend the fieldwork voluntarily.

Please send these to myself or Karyn Virgin (kvirgin@umwelt.com.au), and if you have any questions please don't hesitate to contact us.

I have attached a copy of this medical for your information. Please note your regular GP can complete this.

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Thursday, 7 November 2019 11:10 AM
To: kerrie@awabakal.com.au
Subject: 4660 Centennial Coal Newstan Mine Expansion project

Importance: High

Good morning Kerrie,

I was hoping to get an indication from you of ADTOAC's availability to participate in the field assessment for Newstan Mine in the weeks of the 25th November and 2nd December- If you could let me know as soon as possible that would be greatly appreciated as we need to begin locking in dates for this work with this busy period coming up.

Furthermore, I require your Expression of Interest documentation to be submitted for this work, including the medical as noted in the methodology. It is essential that we obtain this paperwork to be able to engage the registered Aboriginal parties. If you have any questions about this paperwork please don't hesitate to contact me.

Please feel free to call me if you wish to discuss further- I will likely try calling you again this afternoon.

Regards,

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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Mob: 0412 350 780

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Jessica Blackman

From: Laurie Perry <l.perry@optusnet.com.au>
Sent: Friday, 8 November 2019 4:52 PM
To: Jessica Blackman
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project
Attachments: Newstan mine extension project.pdf; WNAC icare Certificate of Currency.pdf; WNAC P&LCertificate of Currency.pdf; WNAC WORKERS COMP WTA050557483122 _CoC.pdf

Hi Jessica

Sorry for being late

cheers

Laurie Perry
CEO - Wonnarua Nation Aboriginal Corporation
Ground Floor 254 John St Singleton NSW
PO BOX 3066
Singleton Delivery Centre 2330
Ph : (02) 6571 8595
Fax : (02) 6545 2099
Mob : 0412 593 020
enquiries@wonnarua.org.au
l.perry@optusnet.com.au
www.wonnarua.org.au

From: Jessica Blackman
Sent: Thursday, 7 November 2019 11:25 AM
To: Laurie Perry <l.perry@optusnet.com.au>
Subject: 4660 Centennial Coal Newstan Mine Expansion project
Importance: High

Good morning Laurie,

As discussed on the phone earlier I was just touching base around fieldwork availability for your group, as we are trying to lock this in ASAP. Can you please advise if you will be able to provide personnel in the weeks of the **25th November and 2nd December**, and which, if any of these weeks suits best?

Secondly can you please complete and send back to me your expression of interest documentation as I need this to be able to continue with the engagement process. I will be on leave tomorrow so if you could possibly supply this by COB today that would be greatly appreciated.

Please feel free to call me if you wish to discuss further.

Regards,

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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Jessica Blackman

From: gillane@bigpond.com
Sent: Tuesday, 12 November 2019 4:42 PM
To: Jessica Blackman
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Ok I will keep that in mind, thank you 😊

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Tuesday, 12 November 2019 4:07 PM
To: gillane@bigpond.com
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Thanks Renee! Any issues or queries, don't hesitate to contact me 😊

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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From: gillane@bigpond.com <gillane@bigpond.com>
Sent: Tuesday, 12 November 2019 4:07 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

No problem Jessica.
I will get it done 😊

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Tuesday, 12 November 2019 4:05 PM
To: gillane@bigpond.com
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Thank you Renee, that's very helpful. I think we have all the necessary paperwork for now but please ensure the medical is completed as noted in the methodology prior to work commencing. I'm not sure if you have received a copy or not but please see the attached- you regular GP is able to complete this.

Cheers,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
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Teralba, NSW 2284

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Mob: 0412 350 780

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From: gillane@bigpond.com <gillane@bigpond.com>
Sent: Tuesday, 12 November 2019 4:03 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Hi Jessica,

My last mane is Gillane.
Please let know if you need anything else?

Best Regards,

Renee 😊

From: Jessica Blackman <jblackman@umwelt.com.au>
Sent: Tuesday, 12 November 2019 8:01 AM
To: gillane@bigpond.com
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Hi again Renee,

What is your last name? I just need to pass your details along to Centennial for their inductions.

Regards,

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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From: gillane@bigpond.com <gillane@bigpond.com>
Sent: Monday, 11 November 2019 5:01 PM
To: 'Laurie Perry' <l.perry@optusnet.com.au>; Jessica Blackman <jblackman@umwelt.com.au>; 'Craig Smith' <Craig@altitudebusiness.com.au>; Karyn Virgin <kvirgin@umwelt.com.au>
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Hi Jessica or Karyn,

I am confirming that I am available forth either dates of 25th November or 2nd December.

Best Regards,

Renee 😊

From: Laurie Perry <l.perry@optusnet.com.au>
Sent: Monday, 11 November 2019 6:29 AM
To: 'Jessica Blackman' <jblackman@umwelt.com.au>; gillane@bigpond.com; 'Craig Smith' <Craig@altitudebusiness.com.au>; 'Karyn Virgin' <kvirgin@umwelt.com.au>
Subject: FW: 4660 Centennial Coal Newstan Mine Expansion project

Hi Jessica or Karyn

I have included Rene my cousin and Craig our bookkeeper in this reply for proposed upcoming work at Newstan mine at Fassifern.

If successful Rene can do this work and Craig will do the invoicing

cheers

Laurie Perry
CEO - Wonnarua Nation Aboriginal Corporation
Ground Floor 254 John St Singleton NSW
PO BOX 3066
Singleton Delivery Centre 2330
Ph : (02) 6571 8595
Fax : (02) 6545 2099
Mob : 0412 593 020

enquiries@wonnarua.org.au
l.perry@optusnet.com.au
www.wonnarua.org.au

From: Laurie Perry
Sent: Friday, 8 November 2019 4:52 PM
To: 'Jessica Blackman' <jblackman@umwelt.com.au>
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Hi Jessica

Sorry for being late

cheers

Laurie Perry
CEO - Wonnarua Nation Aboriginal Corporation
Ground Floor 254 John St Singleton NSW
PO BOX 3066
Singleton Delivery Centre 2330
Ph : (02) 6571 8595
Fax : (02) 6545 2099
Mob : 0412 593 020
enquiries@wonnarua.org.au
l.perry@optusnet.com.au
www.wonnarua.org.au

From: Jessica Blackman
Sent: Thursday, 7 November 2019 11:25 AM
To: Laurie Perry <l.perry@optusnet.com.au>
Subject: 4660 Centennial Coal Newstan Mine Expansion project
Importance: High

Good morning Laurie,

As discussed on the phone earlier I was just touching base around fieldwork availability for your group, as we are trying to lock this in ASAP. Can you please advise if you will be able to provide personnel in the weeks of the **25th November and 2nd December**, and which, if any of these weeks suits best?

Secondly can you please complete and send back to me your expression of interest documentation as I need this to be able to continue with the engagement process. I will be on leave tomorrow so if you could possibly supply this by COB today that would be greatly appreciated.

Please feel free to call me if you wish to discuss further.

Regards,

Jessica Blackman
Senior Archaeologist

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Jessica Blackman

From: Laurie Perry <l.perry@optusnet.com.au>
Sent: Friday, 8 November 2019 8:47 AM
To: Jessica Blackman
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Hi Jessica

Will do today

cheers

Laurie Perry
CEO - Wonnarua Nation Aboriginal Corporation
Ground Floor 254 John St Singleton NSW
PO BOX 3066
Singleton Delivery Centre 2330
Ph : (02) 6571 8595
Fax : (02) 6545 2099
Mob : 0412 593 020
enquiries@wonnarua.org.au
l.perry@optusnet.com.au
www.wonnarua.org.au

From: Jessica Blackman
Sent: Thursday, 7 November 2019 11:25 AM
To: Laurie Perry <l.perry@optusnet.com.au>
Subject: 4660 Centennial Coal Newstan Mine Expansion project
Importance: High

Good morning Laurie,

As discussed on the phone earlier I was just touching base around fieldwork availability for your group, as we are trying to lock this in ASAP. Can you please advise if you will be able to provide personnel in the weeks of the **25th November and 2nd December**, and which, if any of these weeks suits best?

Secondly can you please complete and send back to me your expression of interest documentation as I need this to be able to continue with the engagement process. I will be on leave tomorrow so if you could possibly supply this by COB today that would be greatly appreciated.

Please feel free to call me if you wish to discuss further.

Regards,

Jessica Blackman
Senior Archaeologist

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Jessica Blackman

From: Jessica Blackman
Sent: Thursday, 7 November 2019 11:15 AM
To: Tracey.howie@wannangini.org
Subject: 4660 Centennial Coal Newstan Mine Expansion project

Importance: High

Good morning Tracey,

I just wanted to touch base with you regarding the Newstan Mine Expansion project, which I note you have previously registered an interest in. On 1st October we sent out the draft methodology for fieldwork for this project, including an expression of interest form that needs to be completed for commercial engagement, and I note that Wannangini has not submitted an EOI for this work. Would you like to do so? If so, could you please complete the engagement paperwork included in the methodology and return to me by **COB today,** as we are now beginning the process of engagement and fieldwork planning. Please note the EOI includes a medical that also must be completed.

If Wannangini is interested in participating, I was hoping to get an indication from you of your availability to participate in the field assessment for Newstan Mine in the weeks of the **25th November and 2nd December**- If you could let me know as soon as possible that would be greatly appreciated as we need to begin locking in dates for this work with this busy period coming up.

Please feel free to call me if you wish to discuss further- I will likely try calling you again this afternoon.

Regards,

Jessica Blackman
Senior Archaeologist

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Jessica Blackman

From: Karyn Virgin
Sent: Wednesday, 27 November 2019 4:35 PM
To: arthur.c.fletcher@gmail.com
Cc: Jessica Blackman
Subject: 4660 Newstan Project Information
Attachments: 4660_Methodology_20191001a_ltr1137.pdf; Newstan Directions.pdf

Hi Arthur,
Please find the attached methodology for this project.
With regards to details, we will be on site from 8am to 4pm daily, between the 2nd AND 6th of December. There will be a visitor's induction on the Monday morning.
We will be meeting on Monday 2nd at 8am at the Newstan Colliery Administration Office at 100 Miller Road, Fassifern (please see attached map).
Thanks Arthur,
Karyn

Karyn Virgin
Senior Heritage Consultant/Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284
Phone: (02) 4950 5322

www.umwelt.com.au

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Jessica Blackman

From: Jessica Blackman
Sent: Monday, 11 November 2019 4:15 PM
To: Kerrie Brauer
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

No worries Kerrie, Karyn advised me you have since spoken to her, so all seems to be coming together. 😊

Once Kyle has his medical feel free to send this to either myself or Karyn for our records.

Thank you!

Regards,

Jessica Blackman
Senior Archaeologist

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Mob: 0412 350 780

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From: Kerrie Brauer <kerrie@awabakal.com.au>
Sent: Monday, 11 November 2019 4:13 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project

Hi Jess,

I think that the dates are fine, and just sorting out the medical letter for Kyle and will send the details through soon.

Cheers Kerrie

ATOAC
Kerrie Brauer | Director | Administration | Awabakal Traditional Owners Aboriginal Corporation
M: 04 12 86 63 57 | E: kerrie@awabakal.com.au | www.awabakal.com.au
PO Box 122 Rutherford NSW 2320 Australia

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From: Jessica Blackman [mailto:jblackman@umwelt.com.au]
Sent: Thursday, 7 November 2019 11:10 AM
To: kerrie@awabakal.com.au
Subject: 4660 Centennial Coal Newstan Mine Expansion project
Importance: High

Good morning Kerrie,

I was hoping to get an indication from you of ADTOAC's availability to participate in the field assessment for Newstan Mine in the weeks of the 25th November and 2nd December- If you could let me know as soon as possible that would be greatly appreciated as we need to begin locking in dates for this work with this busy period coming up.

Furthermore, I require your Expression of Interest documentation to be submitted for this work, including the medical as noted in the methodology. It is essential that we obtain this paperwork to be able to engage the registered Aboriginal parties. If you have any questions about this paperwork please don't hesitate to contact me.

Please feel free to call me if you wish to discuss further- I will likely try calling you again this afternoon.

Regards,

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Sunday, 17 November 2019 7:18 PM
To: Tracey Howie
Subject: RE: 4660 Centennial Coal Newstan Mine Expansion project
Attachments: 4660_Methodology_20191029_reminder_ltr.pdf

Hi Tracey, sure thing, it's attached to the bottom of the methodology that was sent out. See attached.

Regards,

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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Mob: 0412 350 780

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From: Tracey Howie <tracey@guringai.com.au>
Sent: Friday, 15 November 2019 9:06 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: 4660 Centennial Coal Newstan Mine Expansion project

Sure. Jackson Walker is having the medical done on Monday.
Could you please resend the EOI for this project. I can't seem to find it in the emails. Just the medical forms.
Cheers
Tracey

A W A B A K A L & G U R I N G A I

Tracey Howie | Director | Awabakal & Guringai Pty Ltd
ABN : 81 609 498 491 | ACN : 609 498 491
M : 0404 182 049 | E : tracey@guringai.com.au
PO Box 122 Rutherford NSW 2320 Australia

On 15 Nov 2019, at 10:56 am, Jessica Blackman <jblackman@umwelt.com.au> wrote:

Thanks Tracey. If you could also fill in the fieldwork engagement form and send through the medical as soon as possible that would be great.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

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Mob: 0412 350 780

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Please consider the environment before printing this email

From: Tracey Howie <tracey@guringai.com.au>
Sent: Friday, 15 November 2019 10:31 AM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: 4660 Centennial Coal Newstan Mine Expansion project
Importance: High

Hi Jessica,

Please find requested documents attached.

A W A B A K A L & G U R I N G A I

Tracey Howie | Director | Awabakal & Guringai Pty Ltd
ABN : 81 609 498 491 | ACN : 609 498 491
M : 0404 182 049 | E : tracey@guringai.com.au
PO Box 122 Rutherford NSW 2320 Australia

> On 15 Nov 2019, at 7:50 am, Jessica Blackman <jblackman@umwelt.com.au> wrote:
>
> Thanks Tracey.
>
> If you could send through the below information for A&G, as well as the medical that is required by Centennial (attached) as a matter of priority that would be appreciated.

Insurance Required

- Workers comp
- Public Liability
- Product Liability

I will update the guys at Centennial as I believe they thought Wannangini was participating in this work rather than A&G.

Regards,

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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Please consider the environment before printing this email

From: tracey.howie@wannangini.org <tracey.howie@wannangini.org>
Sent: Thursday, 14 November 2019 9:39 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: 4660 Centennial Coal Newstan Mine Expansion project
Importance: High

Hi Jessica,

I just found this email. Sorry for not responding earlier.

Wannangini will not be registering an interest for this project.
Awabakal & Guringai Pty.Ltd.(A & G) are an interested party. (Awabakal & Guringai Pty.Ltd is now also the Representative body for Guringai Tribal Link Aboriginal Corporation)

I'll fill in the attached form for A & G if that's ok.

Kind regards
Tracey Howie
Director
Awabakal & Guringai Pty.Ltd.
M: 0404 182049

On 7 Nov 2019, at 11:15 am, Jessica Blackman <jblackman@umwelt.com.au> wrote:

Good morning Tracey,

I just wanted to touch base with you regarding the Newstan Mine Expansion project, which I note you have previously registered an interest in. On 1st October we sent out the draft methodology for fieldwork for this project, including an expression of interest form that needs to be completed for commercial engagement, and I note that Wannangini has not submitted an EOI for this work. Would you like to do so? If so, could you please complete the engagement paperwork included in the methodology and return to me by **COB today,** as we are now beginning the process of engagement and fieldwork planning. Please note the EOI includes a medical that also must be completed.

If Wannangini is interested in participating, I was hoping to get an indication from you of your availability to participate in the field assessment for Newstan Mine in the weeks of the **25th November and 2nd December**- If you could let me know as soon as possible that would be greatly appreciated as we need to begin locking in dates for this work with this busy period coming up.

Please feel free to call me if you wish to discuss further- I will likely try calling you again this afternoon.

Regards,

Jessica Blackman
Senior Archaeologist

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<Contractor Surface Medical.pdf>

Jessica Blackman

From: Jessica Blackman
Sent: Wednesday, 6 November 2019 2:36 PM
To: PeterLeven
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Good afternoon Peter,

Thank you very much for providing this documentation, I will pass this along.

Regards,

Jessica Blackman
Senior Archaeologist

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Teralba, NSW 2284

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From: PeterLeven <peterleven@y7mail.com>
Sent: Tuesday, 5 November 2019 12:27 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: Reminder: 4660 Newstan Mine Extension Project

Hi Jessica,

Following on from our phone conversation please see attached completed Fieldwork Engagement Form and Certificates of Currency.

Regards,
Peter Leven
Managing Director
Awabakal Descendants Traditional Owners Aboriginal Corporation
Email: peterleven@y7mail.com Phone: 0243903740 Mobile: 0405149684
PO Box 137 Budgewoi NSW 2262

Confidentiality Notice: All of the content and any information within or attached to this email is private and confidential and only between Awabakal Descendants Traditional Owners Aboriginal Corporation (ADTOAC), and the addressee/s. Under no circumstance is this information to be copied, emailed, transmitted in any form, faxed, transferred to other departments or allowed to be used within or for reports or any other documents or applications or purposes. The information contained within this email and any attached documents is not to be supplied to or used by any other person/s other than the intended addressee/s subject to our explicit permission.

From: Jessica Blackman [mailto:jblackman@umwelt.com.au]
Sent: Tuesday, 29 October 2019 4:47 PM
Subject: Reminder: 4660 Newstan Mine Extension Project
Importance: High

Dear Registered Aboriginal Party Representatives,

This email is just a friendly reminder on the opportunity to respond to a draft Assessment Methodology and submit Expressions of Interest for commercial engagement in the Aboriginal Cultural Heritage Assessment (ACHA) for the Centennial Newstan Mine Extension Project.

This methodology was developed for **Umwelt project number 4660,** and was distributed for feedback/comment on 1 October 2019. Response to this methodology, **including Expressions of Interest/completed Archaeological Fieldwork Engagement Form with accompanying documentation**, is due by **5pm on 1 November 2019.**

Details for how to respond are shown below:

- Email responses can be made by replying to this email (jblackman@umwelt.com.au)
- Phone responses can be made by calling Jessica Blackman on 02 49505322 (Umwelt office) or 041230780 (mobile)

If you have already responded we thank you for your time and response. If you have not responded, but would like to, then please take this opportunity to submit your organisation's response. A copy of the original methodology letter provided, including the Archaeological Fieldwork Engagement Form, is attached above for your information.

Regards,

Jessica Blackman
Senior Archaeologist

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75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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Jessica Blackman

From: Lynne Fletcher <kauwul@gmail.com>
Sent: Friday, 8 November 2019 11:16 AM
To: Jessica Blackman
Subject: 4660 Newstan Mine Extension

Good Morning Jess

I have sent through the EOI for 4660 Newstan Mine Extension without the Medical as we are still waiting for the Doctor to fill it out.

Have a great day

Kind regards

Lynne Fletcher

Jessica Blackman

From: Jessica Blackman
Sent: Wednesday, 22 January 2020 1:20 PM
Subject: Centennial Newstan Mine Expansion Project Draft ACHAR for Review

Good afternoon,

The below email was distributed earlier this afternoon containing a draft ACHAR for review. The attachment in that email is potentially too large for some email accounts to receive and so please find below a link to a sharefile where this draft ACHAR can be obtained if you have not received the pdf attachment in my earlier email.

https://umwelt.sharefile.com/d-s2f28539fc3843118

I apologise for any inconvenience and if you require a hard copy of this report posted to you, please let me know.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

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Mob: 0412 350 780

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Please consider the environment before printing this email

From: Jessica Blackman
Sent: Wednesday, 22 January 2020 1:07 PM
Subject: Centennial Newstan Mine Expansion Project Draft ACHAR for Review

Good afternoon,

Further to recent email communications, as a Registered Aboriginal party for the Centennial Newstan Mine Expansion project, Umwelt on behalf of Centennial Newstan and in accordance with the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, invite you to review and comment on the draft Aboriginal cultural heritage assessment report.

The report has been prepared in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011). It also includes all relevant archaeological information, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010).

Please note that the report is provided in draft format only and has been developed to incorporate feedback and comments provided by registered Aboriginal parties to date. We ask that you please review and respond carefully. All comments received will be addressed in the finalised report. Due to the size of the report, the appendices have not been included in this draft, however should you wish to read these, please let me know and I can send these through separately. A hard copy of this report can be provided as well upon request.

Please provide comment to me by email or post by no later than **COB Friday 21 February 2020**.

If you require any further information or if you have any queries regarding the project, please do not hesitate to contact me.

As always, if you have any questions, please just give me a call.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Wednesday, 22 January 2020 1:07 PM
Subject: Centennial Newstan Mine Expansion Project Draft ACHAR for Review
Attachments: 4660_R01_ACHA_V2.pdf

Good afternoon,

Further to recent email communications, as a Registered Aboriginal party for the Centennial Newstan Mine Expansion project, Umwelt on behalf of Centennial Newstan and in accordance with the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, invite you to review and comment on the draft Aboriginal cultural heritage assessment report.

The report has been prepared in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011). It also includes all relevant archaeological information, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010).

Please note that the report is provided in draft format only and has been developed to incorporate feedback and comments provided by registered Aboriginal parties to date. We ask that you please review and respond carefully. All comments received will be addressed in the finalised report. Due to the size of the report, the appendices have not been included in this draft, however should you wish to read these, please let me know and I can send these through separately. A hard copy of this report can be provided as well upon request.

Please provide comment to me by email or post by no later than **COB Friday 21 February 2020**.

If you require any further information or if you have any queries regarding the project, please do not hesitate to contact me.

As always, if you have any questions, please just give me a call.

Regards,

Jessica Blackman
Senior Archaeologist

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Jessica Blackman

From: Jessica Blackman
Sent: Monday, 2 March 2020 10:04 AM
To: Arthur Fletcher
Subject: RE: 4660 Newstan Mine ACHAR feedback

Thank you very much for your response Arthur, it is much appreciated.

Regards,

Jessica Blackman
Senior Archaeologist

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75 York Street
Teralba, NSW 2284

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From: Arthur Fletcher <wonn1sites@gmail.com>
Sent: Thursday, 20 February 2020 7:26 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: 4660 Newstan Mine ACHAR feedback

Hi Jessica.
We hope all is well with you guys. After reading the ACHAR I am supportive in general of it . Ps And I thank everyone who gave of themselves especially with the heat and smoke on occasions at the time of the fieldwork . Regards Kauwul - Arthur.
Sent from my iPad

> On 20 Feb 2020, at 3:47 pm, Jessica Blackman <jblackman@umwelt.com.au> wrote:
>
> Good afternoon Arthur,
>
> I tried calling earlier but missed you- I just wanted to touch base and advise that the community feedback period for the Newstan Mine Expansion ACHAR closes tomorrow afternoon, if you wish to provide any feedback on this report prior to this period closing.
>
> Feel free to call me if you have any questions or need clarification about anything.

Regards,

Jessica Blackman
Senior Archaeologist

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Please consider the environment before printing this email

Jessica Blackman

From: Laurie Perry <l.perry@optusnet.com.au>
Sent: Thursday, 20 February 2020 3:56 PM
To: Jessica Blackman
Subject: RE: 4660 Newstan Mine Expansion feedback

Bingo

cheers

Laurie Perry
CEO - Wonnarua Nation Aboriginal Corporation
Ground Floor 254 John St Singleton NSW
PO BOX 3066
Singleton Delivery Centre 2330
Ph : (02) 6571 8595
Fax : (02) 6545 2099
Mob : 0412 593 020
enquiries@wonnarua.org.au
l.perry@optusnet.com.au
www.wonnarua.org.au

From: Jessica Blackman
Sent: Thursday, 20 February 2020 3:41 PM
To: Laurie Perry <l.perry@optusnet.com.au>
Subject: 4660 Newstan Mine Expansion feedback

Good afternoon Laurie,

Thank you for providing your feedback on the Newstan Mine ACHAR over the phone this afternoon. I just wanted to make sure I captured your recommendation accurately, please let me know if you would like to add anything.

Recommendation:

- On the back of the recent devastating bushfires in the Newcastle region, it is requested that consideration be given to conducting cool cultural burns across the Project Area to minimise the risk of future hazards. There is a preference for this work to be conducted by Indigenous businesses, or Aboriginal people with relevant cultural burning knowledge.

Thanks very much,

Jessica Blackman
Senior Archaeologist

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Monday, 3 February 2020 8:13 AM
To: Ryan Johnson
Subject: RE: Centennial Newstan Mine Expansion Project Draft ACHAR for Review

Good morning Ryan, thank you very much for your email. I have noted your endorsement.

Have a great week,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

www.umwelt.com.au

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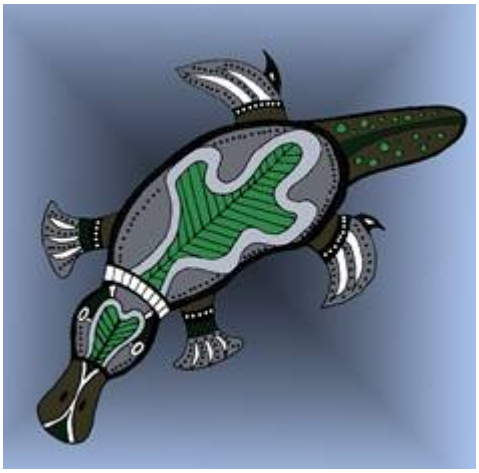
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From: Ryan Johnson <murrabidgeemullangari@yahoo.com.au>
Sent: Friday, 31 January 2020 1:46 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: RE: Centennial Newstan Mine Expansion Project Draft ACHAR for Review

Hi Jessica,
I have read the draft ACHAR for the above project, I endorse the recommendations made.
Kind regards

Ryan Johnson | **Murra Bidgee Mullangari**



Aboriginal Corporation Cultural Heritage

A: PO Box 246, Seven Hills, NSW, 2147
E: murrabidgeemullangari@yahoo.com.au
ICN: 8112

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From: Jessica Blackman [mailto:jblackman@umwelt.com.au]
Sent: Wednesday, 22 January 2020 1:20 PM
Subject: Centennial Newstan Mine Expansion Project Draft ACHAR for Review

Good afternoon,

The below email was distributed earlier this afternoon containing a draft ACHAR for review. The attachment in that email is potentially too large for some email accounts to receive and so please find below a link to a sharefile where this draft ACHAR can be obtained if you have not received the pdf attachment in my earlier email.

https://umwelt.sharefile.com/d-s2f28539fc3843118

I apologise for any inconvenience and if you require a hard copy of this report posted to you, please let me know.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

www.umwelt.com.au

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Please consider the environment before printing this email

From: Jessica Blackman
Sent: Wednesday, 22 January 2020 1:07 PM
Subject: Centennial Newstan Mine Expansion Project Draft ACHAR for Review

Good afternoon,

Further to recent email communications, as a Registered Aboriginal party for the Centennial Newstan Mine Expansion project, Umwelt on behalf of Centennial Newstan and in accordance with the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, invite you to review and comment on the draft Aboriginal cultural heritage assessment report.

The report has been prepared in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011). It also includes all relevant archaeological information, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010).

Please note that the report is provided in draft format only and has been developed to incorporate feedback and comments provided by registered Aboriginal parties to date. We ask that you please review and respond carefully. All comments received will be addressed in the finalised report. Due to the size of the report, the appendices have not been included in this draft, however should you wish to read these, please let me know and I can send these through separately. A hard copy of this report can be provided as well upon request.

Please provide comment to me by email or post by no later than **COB Friday 21 February 2020**.

If you require any further information or if you have any queries regarding the project, please do not hesitate to contact me.

As always, if you have any questions, please just give me a call.

Regards,

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

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Please consider the environment before printing this email

Jessica Blackman

From: Jessica Blackman
Sent: Monday, 2 March 2020 9:51 AM
To: Tamara Towers
Subject: RE: Centennial Newstan Mine Expansion Project Draft ACHAR for Review

Thanks very much for you email Tamara, I have noted your comments.

Have a great week!

Jessica Blackman
Senior Archaeologist

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322
Mob: 0412 350 780

www.umwelt.com.au

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Please consider the environment before printing this email

From: Tamara Towers <worimiacs@gmail.com>
Sent: Friday, 28 February 2020 12:25 PM
To: Jessica Blackman <jblackman@umwelt.com.au>
Subject: Re: Centennial Newstan Mine Expansion Project Draft ACHAR for Review

Hi Jessica,

WACS agree with the recommendations for Centennial Newstan Mine Expansion.

Regards
Tamara Towers

On Wed, 22 Jan. 2020, 1:07 pm Jessica Blackman, <jblackman@umwelt.com.au> wrote:

> Good afternoon,
>
> Further to recent email communications, as a Registered Aboriginal party for the Centennial Newstan Mine Expansion project, Umwelt on behalf of Centennial Newstan and in accordance with the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, invite you to review and comment on the draft Aboriginal cultural heritage assessment report.

The report has been prepared in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011). It also includes all relevant archaeological information, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010).

Please note that the report is provided in draft format only and has been developed to incorporate feedback and comments provided by registered Aboriginal parties to date. We ask that you please review and respond carefully. All comments received will be addressed in the finalised report. Due to the size of the report, the appendices have not been included in this draft, however should you wish to read these, please let me know and I can send these through separately. A hard copy of this report can be provided as well upon request.

Please provide comment to me by email or post by no later than **COB Friday 21 February 2020**.

If you require any further information or if you have any queries regarding the project, please do not hesitate to contact me.

As always, if you have any questions, please just give me a call.

Regards,

Jessica Blackman
Senior Archaeologist

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75 York Street
Teralba, NSW 2284

Phone: (02) 4950 5322

Mob: 0412 350 780

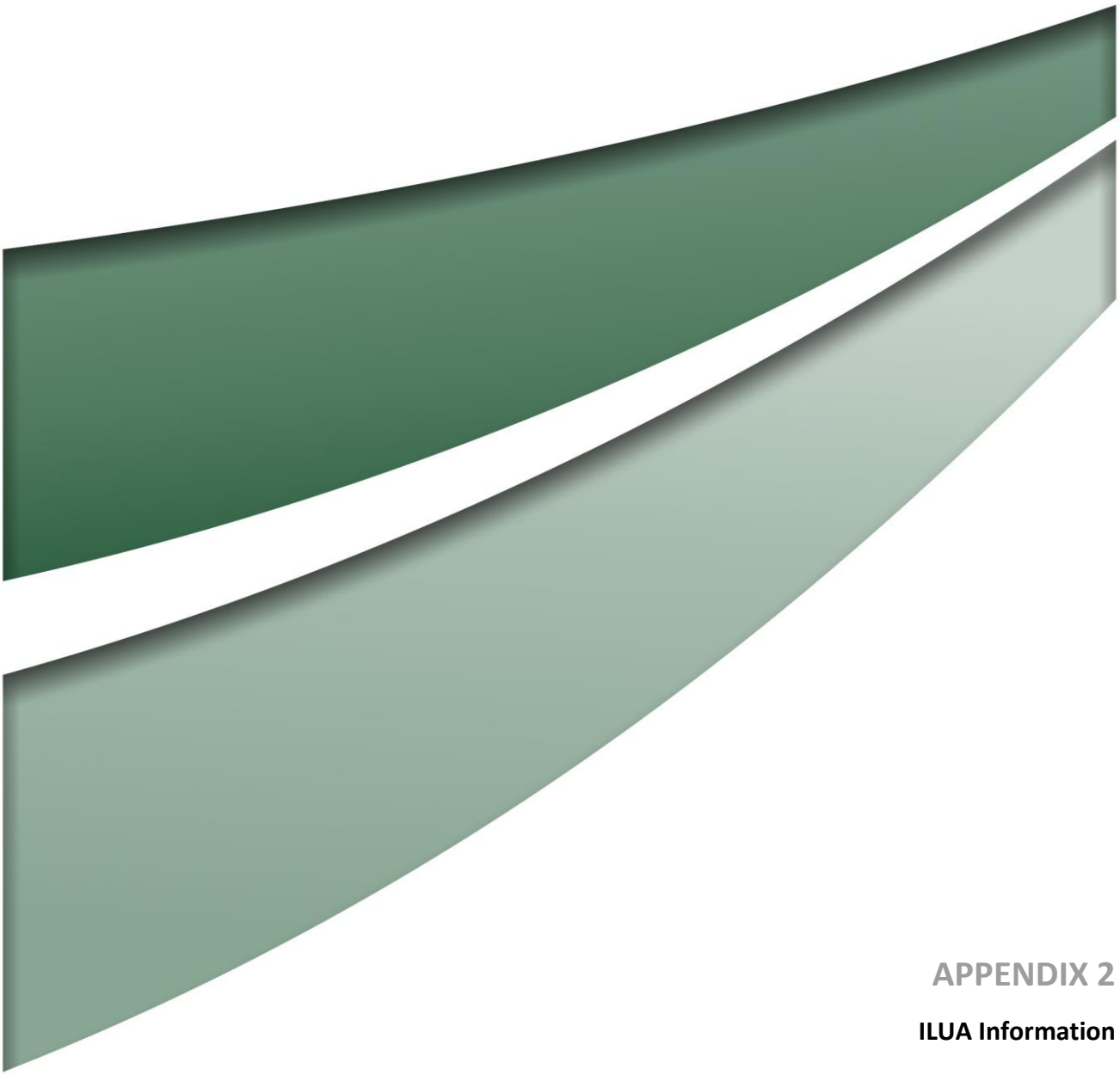
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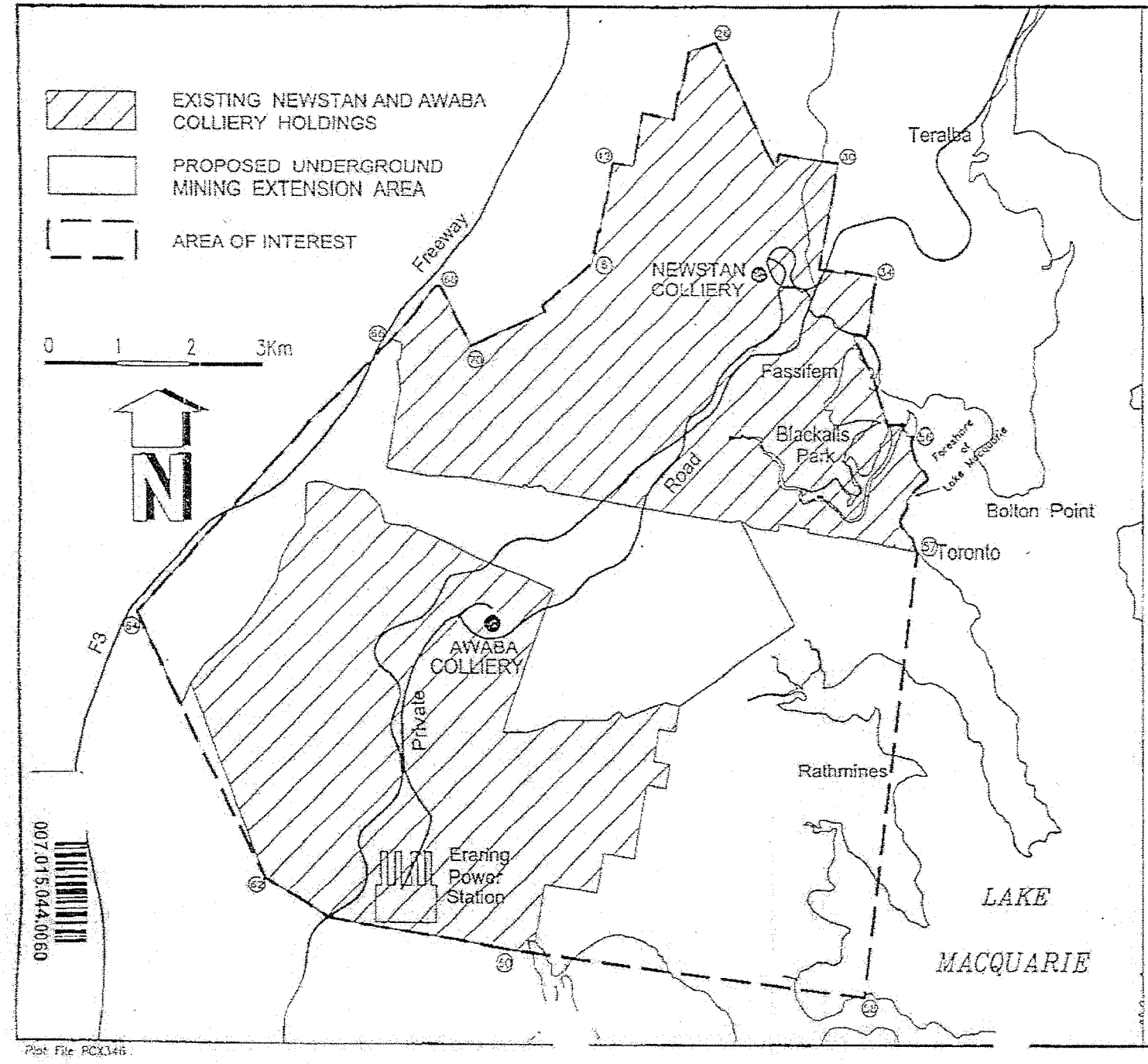
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APPENDIX 2

ILUA Information

Schedule 1



I.S.G. CO-ORDINATES
ZONE 56/1

Cnr	East	North	Cnr	East	North
1	350358	1348749	37	355045	1348490
2	350586	1348864	38	355023	1348505
3	350556	1348923	39	355005	1348513
4	350838	1349172	40	354991	1348517
5	351096	1349399	41	354976	1348520
6	351250	1349534	42	354945	1348516
7	351326	1349970	43	354913	1348520
8	351351	1349957	44	354878	1348527
9	351354	1349978	45	354875	1348527
10	351423	1350378	46	355170	1347921
11	351438	1350376	47	355369	1347287
12	351530	1350910	48	355598	1347300
13	351801	1350864	49	355607	1347288
14	351821	1350861	50	355590	1347261
15	351952	1351597	51	355596	1347228
16	352390	1351520	52	355613	1347213
17	352455	1351859	53	355637	1347204
18	352510	1351960	54	355652	1347205
19	352540	1352078	55	355645	1347162
20	352580	1352295	56	355734	1347147
21	352613	1352391	57	355789	1345582
22	352602	1352408	58	355044	1339589
23	352656	1352447	59	350369	1340145
24	352758	1352465	60	350173	1340169
25	352758	1352485	61	347590	1340629
26	352985	1352550	62	346744	1341156
27	353807	1350829	63	345606	1343469
28	353848	1351645	64	345000	1344750
29	354086	1351006	65	347365	1347344
30	354679	1350902	66	348476	1348454
31	354418	1349456	67	349085	1349193
32	354786	1349393	68	349145	1349193
33	354792	1349425	69	349262	1348992
34	355211	1349352	70	349582	1348358
35	355067	1348501	71	349747	1348441
36	355063	1348472	72	350156	1348647

PC1243

MASTER DEED

Date: 28 May 1999

Victor Perry on behalf
of the Wonnarua People

Powercoal Pty Ltd
ACN 052 533 070

NSW Aboriginal Land Council



Clayton Utz
Lawyers
No. 1 O'Connell Street
Sydney NSW 2000

Native Title Unit
NSW Aboriginal Land Council
33 Argyle Street
Parramatta NSW 2150

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007.015.044.0010

MASTER DEED

DEED made on 28 May 1999

BETWEEN VICTOR PERRY of 14 Kent Street, Singleton NSW 2330 on behalf of THE WONNARUA PEOPLE

AND POWERCOAL PTY LTD ACN 052 533 070 of 244 Pacific Highway, Charlestown NSW 2290 ("Powercoal")

AND NSW ABORIGINAL LAND COUNCIL of 33 Argyle Street, Parramatta NSW 2150 ("NSWALC")

RECITALS

A. Powercoal has applied for an extension lease (the "Newstan Extension Lease") in respect of the Newstan Colliery as shown shaded in grey on the map attached hereto as Schedule 1 (the "Application Area").

B. The Wonnarua People maintain that in accordance with Aboriginal tradition and custom they have a continuing connection with the central and upper Hunter Valley area of New South Wales, which includes the Application Area.

C. Victor Perry on behalf of the Wonnarua People has lodged a native title claim (reference NC 98/6) in respect of the Application Area. That claim was registered on 20 March 1998 and accepted on 1 September 1998 but has not yet passed the threshold test under the Native Title Act 1993 as amended.

D. NSWALC is the representative Aboriginal/Torres Strait Islander body for New South Wales pursuant to section 202(1) of the NTA for the purpose of assisting and representing Aboriginal people in New South Wales with regard to any native title rights or interests held or asserted by such Aboriginal people.

E. A notice pursuant to section 29 of the NTA has been issued in respect of the Mining Lease Application, a copy of which notice is attached as Schedule 2 to this Deed.

F. Powercoal seeks secure title to enable it to carry out exploration and Mining Operations within the Area of Interest.

G. Powercoal strongly supports the principles of reconciliation and the right of self determination of Aboriginal peoples.

H. Victor Perry, as registered native title claimant on behalf of the Wonnarua People, has agreed to enter into an agreement with Powercoal and the State of New South Wales pursuant to section 31(1)(b) of the NTA, the form of which agreement is as set out in Schedule 3 to this Deed.

I. Powercoal and the Wonnarua People wish to enter into an agreement which shall define the ongoing relationship between them in respect of the Area of Interest.

J. The joint objective in entering into this Deed is to secure the following outcomes:-

(a) the issue, consequent on the grant of the Mining Lease Application, of a mining lease which is valid under the NTA;

(b) the consent of the Wonnarua People to the doing of the Powercoal Future Acts;

(c) the execution of a Deed in the terms set out at Schedule 4 and the subsequent registration of that Deed as an Indigenous Land Use Agreement; and

(d) the provision of benefits to the Aboriginal people associated with the Area of Interest.

IT IS AGREED AS FOLLOWS:

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

"**Aboriginal Heritage Protection Protocol**" means the protocol set out in Schedule 5 to this Deed.

"**Anniversary Date**" means the anniversary of the Date of Grant.

"**Annual Payment**" means the amount of $106,000 referred to in clause 8.1(b) as increased pursuant to clause 10.

"**Arbitrator**" means an Arbitrator appointed pursuant to clause 16.

"**Area of Interest**" means the area shown edged in black broken lines on the map attached hereto as Schedule 1.

"**Assign**" means assign, transfer or otherwise dispose of any legal or equitable interest, either in whole or part, whether by joint venture, sale, lease, declaration or creation of a trust or otherwise.

"**Australia**" means the Commonwealth of Australia.

"**Business Day**" means a day on which banks are open for general banking business in Sydney.

"**Commencement Date**" means the date of this Deed .

"**Confidential Information**" means information, other than information in the public domain:-

(a) relating to the Mining Operations which in the course of the negotiation of this Deed or in the carrying out of the Mining Operations is given to or received by the Representative Aboriginal Party, the Wonnarua People or

NSWALC and which Powercoal requests be treated as confidential; and

(b) relating to the Wonnarua People's use, enjoyment and traditional connection with the Area of Interest which in the course of the negotiation of this Deed or in the carrying out of the Mining Operations is given to or received by Powercoal and which the Representative Aboriginal Party or the Wonnarua People requests be treated as confidential.

"**Date of Grant**" means the date on which the Newstan Extension Lease is granted.

"**Deed**" means this deed as amended from time to time.

"**Dispute**" has the meaning given in clause 16.1.

"**Dispute Notice**" has the meaning given in clause 16.1.

"**dollars**" and "**$**" means the legal currency from time to time of Australia.

"**Environmental Legislation**" means any statute, regulation, by-law, proclamation or other regulation of Australia or of New South Wales which has as one of its principal objects, purposes or effects, any one or more of:-

(a) the protection of the environment from harm or degradation;

(b) the prevention, control, abatement or investigation of pollution or contamination or their effects;

(c) the regulation of waste, waste generation, waste disposal;

(d) the regulation of discharges to the environment; or

(e) the prevention, control, abatement, remediation or mitigation of contamination or pollution.

"**Environmental Standards**" means the standards or requirements in respect of the matters set out in paragraphs (a) to (e) in the definition of Environmental Legislation which are specified or fixed by the operation of Environmental Legislation which applies to the project.

"**Financial Year**" means a year ending on 30 June.

"**Future Act**" has the meaning ascribed to the term "future act" in the NTA.

"**Governmental Agency**" means any government, whether federal, state, territorial or local, and any minister, department, office, commission, delegate, instrumentality, agency, board, authority or organ thereof, whether statutory or otherwise.

"**Mining Act**" means the Mining Act 1992 of New South Wales.

"**Mining Lease Application**" means the mining lease application 97 in respect of the

Application Area lodged with the Department of Mineral Resources on 9 October 1997 and which is the subject of the section 29 notice referred to in Recital E.

"**Mining Operations**" means the underground coal mining operations to be carried out by or under the direction of Powercoal within the area of Interest, including without limiting the generality of the foregoing exploration, developing, designing, constructing, extracting, handling and transporting of coal and other products won from the underground coal mining operations in the Area of Interest and any rehabilitation work within the Area of Interest.

"**Newstan Extension Lease**" aside from the meaning given in Recital A, means the lease to be granted pursuant to the Mining Lease Application.

"**Native Title Claim**" means a claimant native title determination application under the NTA, a compensation application under the NTA or an action seeking a determination of native title in any court, made by any person claiming to hold native title.

"**New South Wales**" means the State of New South Wales.

"**NNTT**" means the National Native Title Tribunal established under the NTA.

"**NTA**" means the Native Title Act 1993 (Cth) as amended.

"**Parties**" means all or any of the parties to this Deed and "**Party**" means any one of them.

"**Powercoal Future Act**" means a Future Act in respect of land within the Area of Interest which:-

(a) is capable of being authorised or permitted under the NTA (at the time of the making of this Deed or in the future) by or on behalf of any native title claimants, native title holders or any Aboriginal person who has or claims similar types of rights or interests; and

(b) directly or indirectly, relates to any Mining Operations to be carried on by Powercoal.

"**Representative Aboriginal Party**" means Victor Perry on behalf of the Wonnarua People.

"**Review Dates**" means the Anniversary Dates occurring at 5 yearly intervals, with the first of the Review Dates being that date which is 5 years after the Date of Grant.

"**Right to Negotiate**" means the procedures under Subdivision P of Division 3 of Part 2 of the NTA.

"**Term**" means the term of this Deed as more particularly described in clause 3.

"**Wonnarua Aboriginal Corporation**" means a corporation established to represent the Wonnarua People, to be governed by them and to receive the benefits to be provided

by Powercoal pursuant to this Deed .

1.2 Interpretation

In this Deed, unless the context otherwise requires:

(a) words importing the singular include the plural and vice versa;

(b) words importing a gender include every gender;

(c) references to any document (including this Deed) are references to that document as amended, consolidated, supplemented, novated or replaced from time to time;

(d) references to this Deed are references to this Deed and any Schedule;

(e) references to Recitals, clauses and Schedules are references to recitals of, clauses of, and schedules to, this Deed ;

(f) headings are for convenience only and shall be ignored in construing this Deed;

(g) references to any Party include references to its respective successors and permitted assigns;

(h) references to law include references to any constitutional provision, treaty, decree, convention, statute, act, regulation, rule, ordinance, subordinate legislation, guideline, rule of common law and of equity and judgment;

(i) references to any law are references to that law as amended, consolidated, supplemented or replaced from time to time;

(j) references to any judgment include references to any order, injunction, decree, determination or award of any court or tribunal;

(k) a reference to a Minister, Department, authority, body or person includes the Minister, Department, authority, body or person for the time being performing the functions performed by that Minister, Department, authority, body or person at the date of this Deed;

(l) a reference to Powercoal includes its employees, servants and agents, engaged for the purposes of the Mining Operations and their permitted invitees;

(m) where an expression is defined, another part of speech or grammatical form of that expression has a corresponding meaning;

(n) a reference to a "**related body corporate**" of a body corporate is to a body corporate which is related to that body corporate within the meaning of section 50 of the Corporations Law;

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(o) a reference to "include" or "including" shall be construed without limitation;

(p) references to any person include references to any individual, company, body corporate, association, partnership, firm, joint venture, trust and Governmental Agency;

(q) references to "**associated tenements**" means any exploration licence, mineral claim, mining lease or any other tenement or licence granted by any Governmental Agency which has or may have any connection, whether direct or indirect to the Mining Operations;

(r) references to the "**Wonnarua People**" mean those indigenous people who maintain that in accordance with Aboriginal tradition and custom they have a continuing connection with the Central and Upper Hunter Valley area of New South Wales which includes the Application Area and who are referred to in the Native Title Claim Reference NC 98/6;

(s) any reference to a year is a reference to a period of 12 consecutive months; and

(t) "month" means calendar month.

2. OBLIGATIONS OF THE WONNARUA PEOPLE

2.1 Agreement in relation to the Mining Lease Application

Victor Perry on behalf of the Wonnarua People agrees to the granting of the Newstan Extension Lease and to that end shall on the Commencement Date enter into an agreement with New South Wales in accordance with the form of the agreement set out in Schedule 3 to this Deed.

2.2 Agreement in relation to Powercoal Future Acts

If requested by Powercoal, the Wonnarua People must authorise, consent to, or permit the doing of any Powercoal Future Acts in accordance with whichever of the procedures set out in Subdivision P of Division 3 of Part 2 of the NTA may be appropriate.

2.3 Co-operation with Powercoal

The Wonnarua People must:-

(a) refrain from doing any act, other than an act permitted under this Deed, which would impede, hinder or prevent the valid grant to Powercoal, or the enjoyment by Powercoal, of the Newstan Extension Lease and/or associated tenements granted to Powercoal within the Area of Interest and any rights which Powercoal may have with respect to the Mining Operations;

007.015.044.0016

(b) where possible, within reasonable time frames nominated by Powercoal, use their best endeavours as native title holders or claimants to ensure the valid and prompt grant of any approvals, titles, consent and other entitlements by any Governmental Agency to ensure that Powercoal is able to carry out and continue to carry out Mining Operations for profit; and

(c) Procure any member of the Wonnarua People or any person on their behalf to do, sign, execute and deliver all deeds, documents, instruments and acts reasonably required of them, by notice from Powercoal, any Government Agency, or New South Wales, to give full effect to the terms of this Deed and the rights and obligations of Powercoal under them.

3. TERM

The Term is 21 years from the Commencement Date.

4. ACCESS FOR TRADITIONAL PURPOSES

Powercoal must not impede the Wonnarua People and other persons authorised in writing by the Representative Aboriginal Party from having access to the Area of Interest for traditional purposes, or purposes related thereto, including but not limited to:-

(a) protection and conservation of cultural heritage;

(b) access to sites of significance;

(c) access for ceremonies under traditional law;

(d) gathering material for traditional medicines and ceremonies;

(e) access for fishing purposes.

5. NOVATION TO WONNARUA ABORIGINAL CORPORATION

Upon incorporation of the Wonnarua Aboriginal Corporation:-

(a) the Representative Aboriginal Party must do everything reasonably necessary to novate this Deed to the Wonnarua Aboriginal Corporation; and

(b) the Parties must consent to, and execute, such documents as are reasonably necessary for the novation of this Deed,

- whereby the Wonnarua Aboriginal Corporation shall be substituted for the Representative Aboriginal Party to the intent that the continuing obligations, liabilities and benefits of the Wonnarua People will be assumed by the Wonnarua Aboriginal Corporation.

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6. SUSPENSION OF MINING OPERATIONS

6.1 Notice of Suspension

Powercoal may at any time and from time to time during the currency of this Deed after giving the Liaison Committee written notice of not less than seven days, suspend its Mining Operations and this clause 6 shall thereupon apply.

6.2 Effect of Suspension

During any period of suspension pursuant to this clause 6, Powercoal must comply with this Deed subject to:-

(a) the operation of this clause 6;

(b) the suspension of payments under clause 8 seven days after Powercoal gives the notice under this clause 6, provided that Powercoal shall, on the next Anniversary Date after suspension of its Mining Operations pursuant to this clause 6, pay the amount calculated in accordance with clause 6.3; and

(c) the term "suspension of payments under clause 8" referred to in paragraph (b) of this clause 6.2 means the cessation (rather than deferral) of such payments for the term of any period of suspension. Subject to clause 6.3 no such payments shall accrue during any period of suspension and no payments relating to the period of any suspension shall become due at any time thereafter.

6.3 Amount Payable

The amount payable under this clause 6 shall be calculated by multiplying the amount, which would otherwise be due under clause 8 on the next Anniversary Date, by the number of days not subject to suspension pursuant to this clause 6 and dividing the amount arrived at as a result of the said multiplication by 365.

7. POWERCOAL'S OBLIGATIONS

7.1 Compliance with Environmental Standards

Powercoal must in relation to the Mining Operations meet the Environmental Standards applying to Powercoal.

7.2 Cultural Heritage Protocols

Powercoal must in relation to the Mining Operations comply with the Aboriginal Heritage Protection Protocol.

7.3 Enforcement of Powercoal's Obligations

Powercoal acknowledges that the Representative Aboriginal Party is entitled to take proceedings for the grant of an injunction or for an order for specific performance of

this Deed to prevent or remedy a breach of clause 7.1 or clause 7.2 provided that this clause 7 is not intended to confer any rights on the Wonnarua People, any of their members or any person on their behalf, to claim damages against Powercoal or the directors or officers thereof for a breach of clause 7.1 or clause 7.2.

8. POWERCOAL PAYMENTS

8.1 Periodic Payments

Subject to clause 6 and in the case of the Annual Payment subject to clause 10, Powercoal must make the following payments while it continues Mining Operations:-

(a) upon the Date of Grant - $140,000;

(b) upon each Anniversary Date during the Term - $106,000 (the "Annual Payment");

(c) on the date stipulated in clause 9.1(b) - $10,000.

8.2 Payments to Wonnarua Aboriginal Corporation

Powercoal must pay to the Wonnarua Aboriginal Corporation all amounts which are required to be paid by Powercoal under this clause 8, provided that until the Wonnarua Aboriginal Corporation is incorporated, Powercoal must pay all amounts which are required to be paid by Powercoal under this clause 8 to NSWALC to be held by NSWALC on condition that those amounts be paid to the Wonnarua Aboriginal Corporation upon its incorporation.

8.3 Proportionate Adjustment

If the Term ends other than on an Anniversary Date, Powercoal must at the end of the Term make a final pro-rata payment, the amount of which shall be calculated by multiplying the Annual Payment which would have been due had the Term ended on an Anniversary Date by the number of days prior to the end of the Term and subsequent to the preceding Anniversary Date, and dividing the amount arrived at as a result of the said multiplication by 365.

9. DISBURSEMENT OF THE BENEFITS PAYABLE BY POWERCOAL

9.1 Application of $50,000

Out of the amount payable by Powercoal pursuant to clauses 8.1(a) and (c), $50,000 must be applied as follows:-

(a) $40,000 towards the establishment of a Wonnarua Cultural and Community Centre; and

(b) $10,000 to fund an archaeological survey (including major cave/shelters) in the Area of Interest on the following terms:-

(i) The proposed program to carry out the said survey must be agreed on by the Liaison Committee after having regard to the Development Consent conditions for the Newstan Life Extension Project and all other relevant laws and not duplicate any studies or surveys which have already been carried out in respect of the Area of Interest and which are in the public domain; and

(ii) The payment of the $10,000 to fund the said survey will be made when the Liaison Committee has informed Powercoal that the said survey is ready to be undertaken in accordance with the program referred to in paragraph (b)(i) of this clause 9.1.

9.2 Application of Balance

The balance of the amount payable pursuant to clause 8.1(a) and the amounts payable pursuant to clause 8.1(b) must be applied as follows:-

(a) $60,000 to health programs designed to improve the health of the Aboriginal people associated with the Area of Interest which programs must be operated in conjunction with the Hunter Area Health Board;

(b) $40,000 to education programs to assist Aboriginal people to attend the Hunter Valley Training Co Pty Ltd, TAFE, University and other registered vocational training bodies; and

(c) $6,000 towards the maintenance of the said Wonnarua Cultural and Community Centre.

9.3 Intent of the Parties

It is the intent of the Parties that the payments referred to in clauses 9.2(a) and 9.2(b) are designed to improve the overall health and education levels of all Aboriginal people associated with the Area of Interest. To that end the Wonnarua People and Powercoal hereby authorise and instruct the Liaison Committee that, in addition to fulfilling its functions with regard to the health and education benefits as stipulated in clause 15.2(b), it must ensure that those benefits:-

(a) are applied as democratically as is reasonably possible in accordance with the above statement of intent; and

(b) are administered pursuant to properly constituted programs agreed between the Wonnarua People and:-

(i) in the case of health - the Hunter Area Health Service Board; and

(ii) in the case of education - the Hunter Valley Training Co Pty Ltd, a university, TAFE and/or other registered vocational training body.

9.4 Audited Report

On or before September in each year during the Term the Representative Aboriginal Party must provide to Powercoal a report containing comprehensive details as to how the amounts paid by Powercoal under clause 8 have been applied during the preceding Financial Year. The said report must be audited by independent external auditors from one of the major accounting firms practising in Sydney.

10. CPI ADJUSTMENT

As from the first of the Review Dates and then on each Review Date thereafter the Annual Payment shall be determined in accordance with the following formula:-

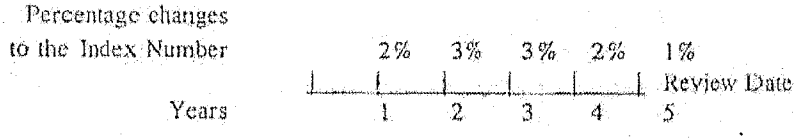
$$A = B + (B \times C)$$

where:

- A is the revised Annual Payment;
- B is the Annual Payment paid each year in the 5 year period immediately preceding the relevant Review Date;
- C is the lesser of:-
  - (a) 12.5%; and
  - (b) the aggregate of the annual percentage changes to the Index Number in respect of the said 5 year period.
- "Index Number" means the Treasury Underlying Rate as published by the Australian Bureau of Statistics, Publication No. 6401.0, Table 12 "Analytical Series, Percentage Changes". If there is any suspension or discontinuance in the publication of the said Treasury Underlying Rate or the Parties agree that to continue to use the Underlying Rate would be inappropriate they shall meet forthwith with a view to negotiating a suitable replacement measure. If the Parties are unable to agree on such a replacement measure within 7 Business Days after the said negotiations have begun the failure to agree shall be deemed to be a Dispute to which clause 16 shall apply.

So as to avoid any doubt below are examples of how this clause 10 is to be interpreted:-

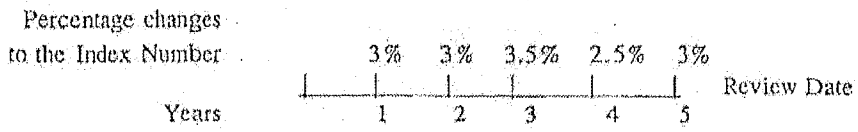
Example 1



Aggregate percentage changes to the Index Number = 11%
∴ C = 11%.

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Example 2



Aggregate percentage changes to the Index Number = 15%
∴ C = 12.5%.

11. EMPLOYMENT PROGRAM

11.1 Acknowledgement of Difficulty

The Wonnarua People and NSWALC acknowledge that because of very difficult market conditions new job opportunities at the Newstan and Awaba Collieries do not exist as at the date of this Deed. However Powercoal acknowledges that some of its operations are, or could be, undertaken by independent contractors and that this could provide work opportunities for the Wonnarua People in the following areas:-

- Land management on rural properties;
- Rehabilitation on mine and exploration drill sites;
- Surface maintenance and cleaning; and
- Archaeological and environmental assessment.

11.2 Employment Offers

Powercoal must make all reasonable efforts to offer employment (on an independent contractor basis) to the Aboriginal people associated with the Area of Interest in respect of the above areas of opportunity; but on the clear understanding that any such offers of employment must be on a competitive basis, after due regard is had by Powercoal to the skill and experience level of other prospective employees.

11.3 Cultural Awareness Program

Powercoal undertakes to seek the assistance of the Wonnarua People in relation to any cultural awareness program which Powercoal undertakes with respect to the Area of Interest.

12. FULL COMPENSATION

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The benefits provided by Powercoal under this Deed are in full satisfaction of any and all compensation that might be payable, and any other rights, under any laws (including common law, equity or statute) for the obtaining and enjoying of any rights with respect to the Mining Operations and any claims that may be made by any native title holders (if there are any), or any person on their behalf, against Powercoal on the basis

of any derogation of the rights of those native title holders. The Representative Aboriginal Party releases Powercoal from any liability that might arise in relation to the subject matter of this clause 12.

13. INDEMNITY

In the event that any person or persons, other than members of the Wonnarua People establish that they have native title in relation to any part of the Area of Interest and that they are entitled to compensation from Powercoal as a consequence of their having such native title, then the Wonnarua People must indemnify Powercoal for the amount which Powercoal is required to pay as compensation during the Term provided that such compensation shall not exceed the amount of the payments received by the Wonnarua People under this Deed.

14. AUTHORITY TO ENTER INTO DEED

14.1 Authority

A reference in this Deed or any of its schedules to a decision, authorisation, instruction, direction, consent, nomination or to the wishes of the Wonnarua People, is a reference respectively to a decision taken, an instruction or direction given, or nomination made, or to the wishes held, by the Wonnarua People, as the case may be, collectively, as ascertained through a process of consultation and decision making:-

(a) in accordance with the traditional laws and customs of the Wonnarua People; or

(b) where no such process exists, or where the Wonnarua People so choose, in accordance with a process determined by the Wonnarua People.

14.2 Warranty

Victor Perry represents and warrants that:-

(a) he is a member of the Wonnarua People;

(b) he is authorised by the Wonnarua People to enter into this Deed; and

(c) where in this Deed he purports to bind the Wonnarua People to act or to refrain from acting in a particular manner he does so:

(i) pursuant to his authority as aforesaid; and

(ii) so as to bind the Wonnarua People collectively to act or to refrain from acting in that manner.

15. LIAISON COMMITTEE

15.1 Constitution

Forthwith after the Commencement Date the Parties must establish a liaison committee (the "**Liaison Committee**") consisting of four representatives (collectively "**Representatives**" and individually "**Representative**") with two Representatives nominated by Powercoal and two Representatives nominated by the Wonnarua People. A quorum of the Liaison Committee shall be one Representative of Powercoal and one Representative of the Wonnarua People.

15.2 Functions of the Liaison Committee

The functions of the Liaison Committee shall be to:-

(a) maintain liaison between Powercoal and the Wonnarua People;

(b) monitor the disbursements of amounts payable and benefits provided under this Deed and to develop policies for determining eligibility to receive the said benefits;

(c) review the operation of this Deed and do everything reasonably possible to resolve any disputes between the Parties;

(d) make recommendations as follows:-

- to the Parties regarding the operation of this Deed;
- to Powercoal as to which Aboriginal people should be considered for employment as referred to in clause 11;
- as to which Aboriginal people are to receive the benefits referred to in clause 9.2(a) and 9.2(b); and
- perform such other functions as may be agreed between Powercoal and the Wonnarua People,

PROVIDED THAT any recommendation made pursuant to this paragraph (d) of clause 15.2 must be unanimous.

15.3 Chairperson and Secretary

The Wonnarua People and Powercoal must procure that the Liaison Committee at its first meeting (and then from time to time as agreed by the Representatives) appoints one of the Representatives to be chairperson. One of the Representatives of Powercoal shall be the secretary of the Liaison Committee. The chairperson shall not have any sort of casting vote or special power.

The functions of the secretary of the Liaison Committee shall be to:-

(a) organise properly convened meetings of the Liaison Committee, prepare agendas and take minutes of those meetings;

(b) forward agendas and minutes of the said meetings to all the Representatives in a timely manner; and

(c) to perform such other duties as may be directed on a unanimous basis by the Representatives.

15.4 Frequency of Meetings

The Parties agree that the Liaison Committee shall meet at least twice a year at such times and places as agreed by Powercoal and the Wonnarua People.

15.5 Costs of the Liaison Committee

Powercoal must pay all reasonable costs incurred by Representatives in attending meetings of the Liaison Committee, provided that such costs shall not include accommodation costs and travelling costs shall not exceed the costs of travelling from places in the Hunter Valley.

16. ARBITRATION

16.1 First Referral

Any dispute arising out of this Deed (a "Dispute") shall be referred for resolution in the first instance to the Liaison Committee. If the Dispute is not resolved within 14 days after being so referred a Party may give notice (a "Dispute Notice") requiring the Dispute to be referred to arbitration.

16.2 Expedited Arbitration

The Dispute will be referred to expedited arbitration at the request of any Party in accordance with the Expedited Rules as amended below:-

(a) the arbitration will take place in Sydney;

(b) evidence is to be in the form of written affidavits;

(c) the arbitrator is bound by the rules of evidence;

(d) all questions that arise for determination in the course of the arbitration are to be determined according to law;

(e) each of the Parties must, within 14 days after the appointment of the arbitrator:

(i) make a written submission as to how the Dispute should be resolved, including suggested terms of reference, to the arbitrator; and

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(ii) give a copy of the said submission to the other Party;

(f) the Parties must procure that the arbitrator shall, within 40 Business Days after his or her appointment, make a determination in relation to the Dispute and in doing so, must adopt the submission made by the Party (to the Dispute) that most closely accords with the arbitrator's opinion in the matter;

(g) the submission that is adopted by the arbitrator under paragraph (f) of this clause 16.2 shall be deemed to be the decision of the arbitrator;

(h) the costs of the arbitration shall be borne by the Party against whom the arbitrator makes his or her determination;

(i) the arbitrator shall include in his or her determination detailed reasons to enable the Parties to understand the basis for the determination; and

(j) each Party is entitled to be represented in the arbitration by a duly qualified legal practitioner.

The arbitration is to be conducted before an arbitrator agreed on by the Parties, or if they are unable to agree within 7 days of a written request by one of the Parties to the other Parties requiring them to attempt to agree upon an arbitrator, a person to be appointed by the President for the time being of the Institute of Arbitrators, Australia. If the President appoints the person to act as arbitrator, the Parties require that the arbitrator to be appointed must be a senior lawyer or retired judge experienced in the conduct of the coal mining industry.

16.3 Resolution of Dispute

The resolution of a Dispute occurs:-

(a) if and when the Parties execute a written agreement recording the basis of the resolution of the Dispute; or

(b) upon the determination of the arbitrator, the expiration of the time for appeal against any part of the arbitrator's determination.

17. INDIGENOUS LAND USE AGREEMENT

17.1 Execution of deed

The Parties must forthwith after the signing of this Deed execute a deed in the terms set out in Schedule 4 and thereafter must do all things necessary to enable that deed to be lodged for registration as an Indigenous Land Use Agreement (Area Agreement) pursuant to section 24CK of the NTA as soon as possible.

17.2 Active Support

The Parties must actively support and do all such further acts and things as shall reasonably be required to assist in the registration of the said deed as an Indigenous

Land Use Agreement pursuant to Subdivision C of Division 3 of Part 2 of the NTA. In particular NSWALC must:-

(a) do everything reasonably necessary to procure the execution of the deed referred to in Schedule 4 by the registered claimant, Stephen Seiver;

(b) fully support Powercoal in its efforts to secure the said registration; and

(c) promptly do everything reasonably required to resolve any claims, actions, suits, demands or objections made or raised by any person within the 3 month pre-registration period (as stipulated by the NTA) which Powercoal reasonably considers have no merit and which could delay or jeopardise the said registration.

18. CONFIDENTIALITY

The Parties agree that during the term of this Deed Confidential Information must not be disclosed to any person not a Party, a related corporation of a Party or a prospective assignee of any interest held by Powercoal within the Area of Interest, without the consent of each other Party, except in the case of Powercoal where such disclosure is required:

(a) to satisfy the conditions of the tenements held from time to time by Powercoal within the Area of Interest;

(b) to satisfy obligations of Powercoal under the Mining Act;

(c) to satisfy any stock exchange listing requirements;

(d) to satisfy the requirements of the Australian Securities and Investment Commission or any successor thereto; or

(e) otherwise by law.

19. GENERAL CLAUSES

19.1 No Termination for Breach

No breach of this Deed by any Party shall give to any other Party a right to elect to terminate this Deed, but that Party may exercise any right or remedy otherwise available to it in respect of such a breach.

19.2 Costs

Powercoal must pay the reasonable legal costs of and incidental to the negotiation of this Deed and the agreement referred to in clause 17 agreed and assessed at $50,000. Such costs are to be paid to the Native Title Unit of NSWALC on the execution of this Deed. Powercoal shall pay all registration fees and stamp duties payable in connection with this Deed.



19.3 Notices

A notice, consent, approval or other communication (each a "Notice") under this Deed must be in writing and signed by or on behalf of the Party giving it, addressed to the Party to whom it is to be given and:

(a) delivered to that Party's address;

(b) sent by pre-paid mail to that Party's address; or

(c) transmitted by facsimile to that Party's address.

A notice given to a Party in accordance with this clause 19.3 is treated as having been given and received:

(i) if delivered to a Party in accordance with this clause 19.3 is treated as having been given and received;

(ii) if sent by pre-paid mail, on the third Business Day after posting; or

(iii) if transmitted by facsimile to a Party's address and a correct and complete transmission report is received, on the day of transmission if a Business Day, otherwise on the next business day.

For the purposes of this clause 19.3 the addresses of the Parties shall be as set out in Schedule 6 to this Deed.

A Party may change his or its address for service by serving a Notice to that effect upon the other Parties.

19.4 Waiver

The non-exercise of or delay in exercising any power or right of a Party does not operate as a waiver of that power or right, nor does any single exercise of a power or right preclude any other or further exercise of it or the exercise of any other power or right. A power or right may only be waived in writing, signed by the Party to be bound by the waiver. Where this Deed provides that any act of a Party has to be done in a particular manner or form, the other Party shall waive its rights to take action for a breach of this Deed if the Party, when it does the act, substantially complies with the required manner or form.

19.5 Amendment

This Deed may only be amended or supplemented in writing, signed by all the Parties.

19.6 Severability

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Any provision in this Deed which is invalid or unenforceable is to be read down, if possible, so as to be valid and enforceable, and is otherwise capable of being severed to the extent of the invalidity or unenforceability, without affecting the remaining

provisions of this Deed or affecting the validity or enforceability of that provision.

19.7 Further Assurance

Each Party must do, sign, execute and deliver and must procure that each of its employees and agents does, signs, executes and delivers, all deeds, documents, instruments and acts reasonably required of it or them by notice from another Party to carry out and give full effect to this Deed and the rights and obligations of the Parties under it.

19.8 Entire Agreement

This Deed is the entire agreement of the Parties on the subject matter of this Deed. The only enforceable obligations and liabilities of the Parties in relation to the said subject matter are those that arise out of the provisions contained in this Deed. All representations, communications and prior agreements in relation to the subject matter are merged in and superseded by this Deed.

19.9 Exclusion of Agency, Partnership, Joint Venture

Nothing in this Deed is to be treated as creating a partnership or joint venture between the Parties under the laws of any applicable jurisdiction and no Party may act or has any authority to act as agent of or in any way bind or commit the other Party to any obligation.

19.10 Stamp Duty

Powercoal shall pay stamp duty if required on or in respect of:

(a) this Deed; and

(b) all payments made by Powercoal under this Deed.

19.11 Assignment

Powercoal is able to assign all or part of its rights under this Deed to another party, provided that other party assumes the obligations of Powercoal under this Deed and the assignor gives notice to the Wonnarua People of that assignment. This clause 19.11 does not alter the rights or obligations of Powercoal under the Mining Act.

Powercoal may assign any interest which it holds within the Area of Interest provided the assignee acknowledges and accepts in writing that it is bound by the provisions of this Deed and any transactions contemplated by it as if it were a Party and shall assume all the rights and shall observe and perform all of the obligations of Powercoal (to the extent of the interest the subject of the assignment) under or in relation to this Deed which are subsisting at or incurred or arise on and from the date of assignment.

Executed as a deed.



SIGNED for and on behalf of)
THE WONNARUA PEOPLE by)
VICTOR PERRY in the presence of:)

X ..... (Signature)

X ..... (Signature of Witness)

TOMMY MILLER (Name of Witness in Full)

THE COMMON SEAL of POWERCOAL)
PTY LTD ACN 052 533 070 was affixed by)
the authority of the Board of Directors in the)
presence of:)

POWERCOAL PTY. LTD. ACN 052 533 070 Common Seal

..... (Signature of Secretary/~~Director~~)

..... (Signature of ~~Director~~)

PHILIP IRWIN (Name of Secretary/~~Director in Full~~)

PHILLIP JAMES MCCARTHY (Name of Director in Full)

SIGNED for and on behalf of)
NSW ABORIGINAL LAND COUNCIL by)
OSSIE CRUSE, CHAIRPERSON in the)
presence of:)

X ..... (Signature)

..... (Signature of Witness)

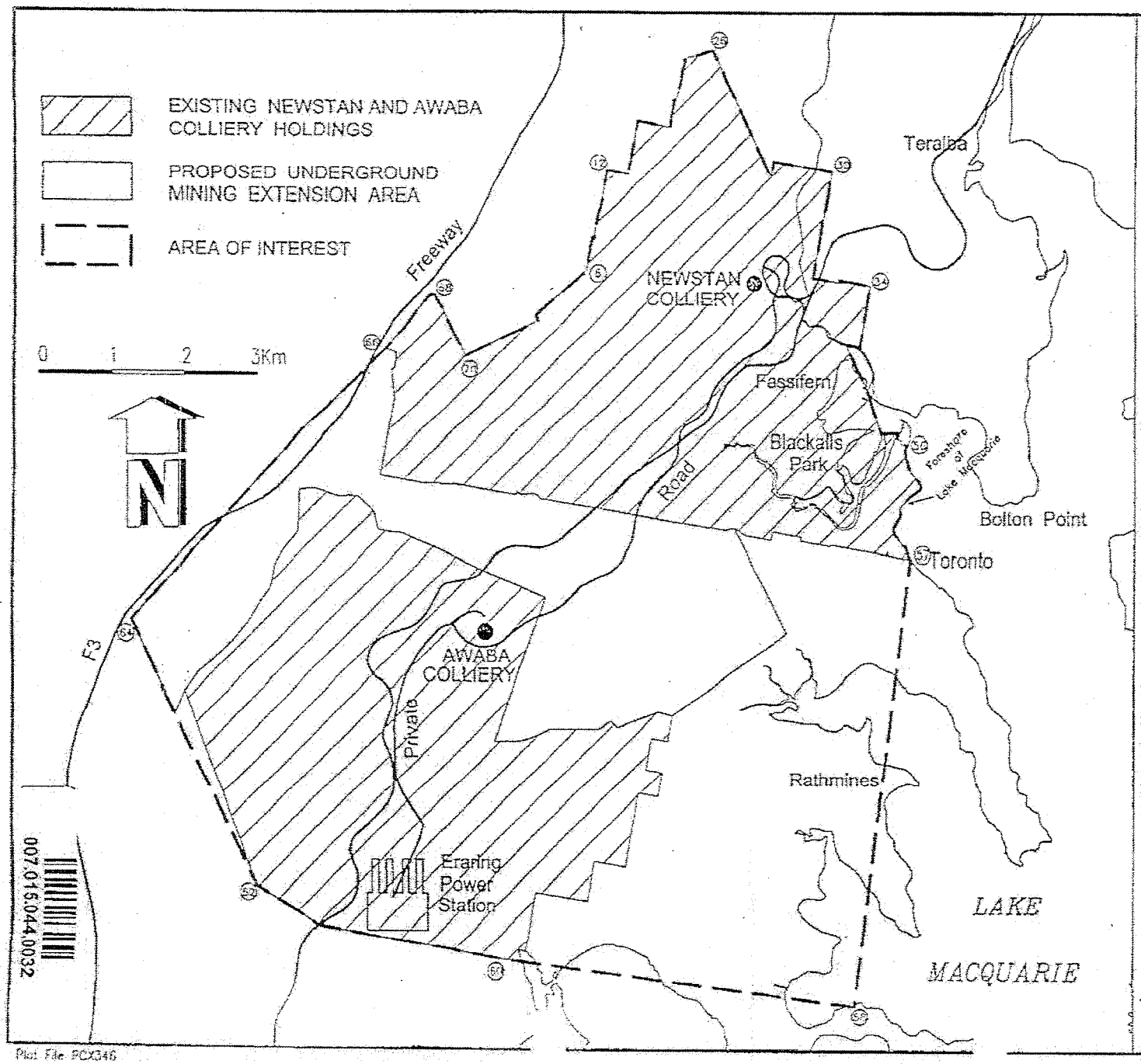
SIMON BLACKSHIELD (Name of Witness in Full)

007.015.044.0030

SCHEDULE 1

AREA OF INTEREST

007.015.044.0031



I.S.G. CO-ORDINATES
ZONE 56/1

Cnr	East	North	Cnr	East	North
1	350358	1348749	37	355045	1348490
2	350586	1348864	38	355023	1348585
3	350556	1348923	39	355005	1348513
4	350838	1349172	40	354991	1348517
5	351096	1349399	41	354976	1348520
6	351250	1349534	42	354945	1348516
7	351326	1349970	43	354913	1348520
8	351351	1349957	44	354878	1348527
9	351354	1349976	45	354875	1348527
10	351423	1350378	46	355170	1347921
11	351438	1350376	47	355369	1347287
12	351530	1350910	48	355598	1347300
13	351801	1350864	49	355607	1347288
14	351821	1350861	50	355590	1347261
15	351952	1351597	51	355596	1347228
16	352390	1351520	52	355613	1347213
17	352455	1351859	53	355637	1347204
18	352510	1351960	54	355652	1347206
19	352540	1352078	55	355645	1347162
20	352580	1352295	56	355734	1347147
21	352613	1352391	57	355789	1345582
22	352602	1352408	58	355044	1339589
23	352656	1352447	59	350369	1340145
24	352758	1352465	60	350173	1340169
25	352758	1352465	61	347590	1340629
26	352985	1352550	62	346744	1341156
27	353807	1350829	63	345606	1343469
28	353848	1351045	64	345000	1344750
29	354086	1351006	65	347365	1347344
30	354679	1350902	66	348476	1348454
31	354418	1349456	67	349085	1349193
32	354786	1349393	68	349145	1349193
33	354792	1349425	69	349262	1348992
34	355211	1349352	70	349582	1348358
35	355067	1346501	71	349747	1348441
36	355063	1348472	72	350156	1348647

Schedule 1

PC1243

SCHEDULE 2

SECTION 29 NOTICE

THE NEWCASTLE HERALD

Wednesday, 25 February 1998

MINING NOTICE

This notice is published in accordance with the requirements of Clause 24(3) of Schedule 1 of the Mining Act 1992 and Section 29 of the Commonwealth's Native Title Act 1993.

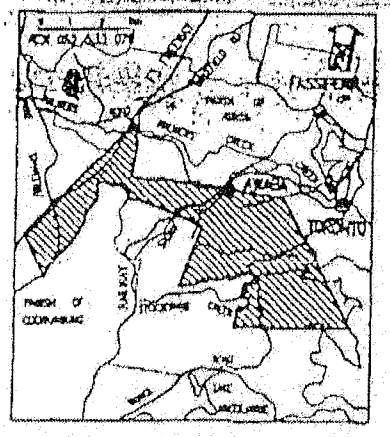
Mining Lease Application No. 97 (MLA 97), (Singleton Mining Division) by Powercoal Pty Ltd (ACN 052 533 070) has been lodged. The application is to mine for coal by underground mining methods. This application embraces an area of about 2216 hectares as shown on the diagram below. The application excludes all surface lands.

After all necessary legislative and administrative requirements have been satisfied it is proposed to recommend to the Minister that a mining lease be granted for a term of twenty-one years.

MLA 97 is located south and west of the town of Awaba in the Parishes of Coorumbung and Awaba, County of Northumberland. In accordance with Clauses 26 & 28 of Schedule 1 of the Mining Act 1992, any person who is not entitled, under the Environmental Planning & Assessment Act (EPAA) 1979, to make submissions to the granting of development consent before the land may be used for the purpose of obtaining minerals may lodge an objection to the granting of the lease. (Persons who are entitled to lodge objections under the EPAA should wait for the publication of the relevant development application.)

Any objection to be made pursuant to Clauses 26 & 28 must be received on or before 25th March, 1998 and should be addressed to the Director General, Department of Mineral Resources, PO Box 536, St Leonards, NSW 2065. A fee of $120 must accompany the objection.

Please note that in accordance with Section 30 of the Commonwealth's Native Title Act 1993, any person who becomes a registered native title claimant on or before 25th April, 1998, becomes a 'native title party' in relation to the proposed grant of this mining lease. Native title claims must be lodged with the Registrar of National Native Titles Tribunal.



007.015.044.0034

SCHEDULE 3

SECTION 31(1)(b) AGREEMENT

007.015.044.0035

THIS DEED is made on 1999

BETWEEN

THE HONOURABLE EDWARD OBEID OAM, MLC THE MINISTER FOR MINERAL RESOURCES FOR AND ON BEHALF OF THE STATE OF NEW SOUTH WALES ("Government party")

and STEPHEN SEIVER ("native title party"), acting for and on behalf of herself/himself/themselves and all persons on whose behalf the native title claim is made

and POWERCOAL PTY LTD ACN 052 533 070 being a company incorporated in the State of New South Wales having its Registered Office at 244 Pacific Highway Charlestown NSW 2290 ("grantee party")

RECITALS

A. The grantee party has made application for the mining lease.

B. If the grant of the mining lease affects native title it will be a future act which is valid under Subdivision M of Division 3 of Part 2 of the *Native Title Act 1993* (C'th) (the "*Native Title Act*").

C. The Government party has given notice of its intention to grant the mining lease in accordance with section 29 of the *Native Title Act*.

D. The native title party has lodged with the National Native Title Tribunal a native title claim in relation to the land.

E. The native title claim has been entered in the Register of Native Title Claims and the native title party is a registered native title claimant but the registration test has not been applied.

F. The parties have negotiated under Subdivision B, Division 3, Part 2 (prior to 30 September 1998) and Subdivision P, Division 3, Part 2 (after 30 September 1998) of the *Native Title Act* in relation to the Government party's intention to grant the mining lease.

G. The native title party agrees to the grant of the mining lease and this Deed is entered into for the purpose of ensuring the validity of the mining lease under the *Native Title Act*.

007.015.044.0036

OPERATIVE PROVISIONS

INTERPRETATION

1.1 In this Deed unless the contrary intention appears:

"ancillary agreement" means any existing or future agreement (including, without limitation, the agreement(s) (if any) noted in the Schedule) made between a native title party and the grantee party or any other person in connection with the grant of the tenement(s) and/or the grantee party exercising its rights and discharging its obligations under the tenement(s);

"mining lease" means the mining lease to be granted pursuant to the application described in the schedule;

"National Native Title Tribunal", "native title", "native title party", "relevant Minister", "Register of Native Title Claims" and "registered native title claimant" have the same meaning as they have in the *Native Title Act*.

"native title claim" means an application for determination of native title described in the Schedule;

"subject land" means the land the subject of the mining lease application;

"tenement" means the mining lease to be granted pursuant to the application described in the Schedule.

1.2 In this Deed, unless the contrary intention appears;

(a) the word person includes a firm, body corporate, statutory corporation, an unincorporated association or an authority and a reference to a gender includes each other gender;

(b) the singular includes the plural and vice versa;

(c) a reference to a person includes a reference to the person's executors, administrators, successors, substitutes (including but not limited to persons taking by novation) and assigns;

(d) an agreement, representation or warranty on the part or in favour of two or more persons binds or is for the benefit of them jointly and severally;

(e) a reference to anything is a reference to the whole or any part of it and a reference to a group of persons is a reference to any one or more of them.

(f) the expression "the native title party" includes each and every native title party in relation to the subject land and the grant of the mining lease.

AUTHORITY TO ENTER INTO DEED

2. The native title party represents and warrants that all necessary authorisations have been obtained to enter into this Deed and this Deed is valid and binding and enforceable in accordance with its terms and against each native title party and all the persons on whose behalf the respective native title claim is made.

AGREEMENT TO GRANT OF TENEMENT

3. The native title party:

(a) agrees to the grant of the mining lease and to the grantee party exercising its right and discharging its obligations under the mining lease: and

(b) acknowledges that this Deed is an agreement for the purpose of section 28(1)(f), section 31(1)(b) and section 41A of the *Native Title Act*.

LODGEMENT WITH THE NATIONAL NATIVE TRIBUNAL

4. The Government party is authorised on behalf of the parties to give a copy of this Deed to the National Native Title Tribunal as the arbitral body pursuant to section 41A of the *Native Title Act* and to advise the relevant Minister in writing of the making of this Deed of Agreement.

COMPENSATION TO BE SET OFF

5.1 This clause 5 applies if a native title party:

(a) receives or is entitled to receive from the grantee party or any other person any compensation, benefit or consideration ("compensation entitlement") whether under any ancillary agreement or otherwise; and

(b) makes any claim for compensation, damages or other relief whatsoever against the Government party or any officer or agency of the Government party ("compensation claim")

in connection with the grant of the mining lease and/or the grantee party exercising its rights or discharging its obligations under the mining lease and their claimed effect on any native title rights of the native title party, whether the compensation claim arises under *Native Title Act* or otherwise.

5.2 Each native title party agrees that any compensation entitlement is to be taken into account in determining any compensation claim and is to be set off against any compensation claim whether that claim is determined by agreement of the parties or a court or tribunal or body having jurisdiction or power to make a determination in relation to the compensation claim.

5.3 Each native title party and the grantee party agree that at the request of the Government party they:

(a) will provide full particulars including a statement of account of the compensation entitlement; and

(b) produce for inspection and copying any document (as that word is defined in the dictionary to the *Evidence Act 1995* (C'th)) relating to the compensation entitlement including without limitation any ancillary agreement.

5.4 The benefits (including any financial benefits to be provided by or under any ancillary agreement) constitute full compensation within the meaning of Division 5 of Part 2 of the *Native Title Act* or any other Act (whether of the Commonwealth or the State) for the creation of a right to mine the land and for any consequential impairment of any native title rights and interests.

GOVERNMENT PARTY NOT LIABLE FOR ANCILLARY AGREEMENT

6. Each native title party and the grantee party acknowledge that neither the Government party nor their officers, employees or agents have any obligation or liability whatsoever in connection with the rights and obligations of a native title party or the grantee party under an ancillary agreement.

DEED AND ANCILLARY AGREEMENT NOT CONDITIONS OF GRANT

7. The provisions of the Deed and of any ancillary agreement are not conditions of the grant of the mining lease under the *Mining Act 1992*.

DEED PREVAILS

8. The grantee party and each native title party acknowledge that the provisions of this Deed prevail over the provisions of any ancillary agreement to the extent of any inconsistency.

NO ACKNOWLEDGEMENT OF NATIVE TITLE

9. By entering into this Deed the Government party does not acknowledge the existence of native title to the subject land.

EFFECT UPON NATIVE TITLE RIGHTS

10. By entering into this Deed the rights (if any) of each native title party in connection with the claimed native title to the subject land are not affected except as is provided for in, and to the extent necessary to give effect, to this Deed.

INDEMNITY

11. The grantee party will indemnify the Crown in right of New South Wales, and will keep it indemnified against all costs including legal costs on an indemnity basis, compensation and damages incurred or suffered, directly or indirectly, by the Crown in relation to the grant of the mining leases as a result of any person establishing that:

    (a) the notice issued pursuant to section 29 of the Native Title Act is in any way defective or invalid and that he or she is entitled to payment of compensation from the Crown whether under the Native Title Act or any other law as a consequence of his or her having such interests; or

    (b) he or she is entitled to damages against the Crown in right of New South Wales, it successors, ministers, officers, servants and agents, in relation to the grant of the mining leases in derogation of the rights of a native title holder.

GENERAL

12.1 Each party agrees, at its own expense, on the request of another party, to do everything reasonably necessary to give effect to this Deed and the matters contemplated by it.

12.2 Each party will pay its own legal and other costs and expenses in connection with the preparation and completion of this Deed, except for stamp duty. The grantee party is to pay all stamp duty (including fines or penalties) payable on or with respect to this Deed.

12.3 This Deed is governed by the law in force in the State of New South Wales.

SIGNED SEALED AND DELIVERED BY THE HONOURABLE EDWARD OBEID OAM, MLC THE MINISTER FOR MINERAL RESOURCES FOR AND ON BEHALF OF THE STATE OF NEW SOUTH WALES

in the presence of

_____
Signature of Witness

_____
Signature of Government Party

_____
Name of Witness (block letters)

THE COMMON SEAL OF POWERCOAL PTY LIMITED WAS AFFIXED IN THE PRESENCE OF:

_____
(Name of grantee party)
in the presence of:

_____
Signature of grantee party

_____
Signature of Witness

_____
Name of Witness (block letters)

SIGNED SEALED AND
DELIVERED BY

(Name of native title party)
in the presence of:

Signature of native title party

Signature of Witness

Name of Witness
(block letters)

007.015.044.0042

DEED FOR GRANT OF MINING LEASE

Native Title Act 1993 (C'th)
Sections 28(1)(f) and 41A

SCHEDULE

1.	Mining Lease	:	
	Application Number	:	97 Singleton
	Grantee Party	:	Powercoal Pty Ltd ACN 052 533 070
2.	Native Title Claim	:	NC 98/8
	Native Title Party/Parties	:	Stephen Seiver on behalf of the Boongarri clan of the Darkungung country Peoples.
3.	Ancillary Agreement	:	
	Parties	:	Powercoal Pty Ltd ACN 052 533 070, Victor Perry, New South Wales Aboriginal Land Council and Stephen Seiver
	Date	:	

007.015.044.0043

THIS DEED is made on 1999

BETWEEN

THE HONOURABLE EDWARD OBEID OAM, MLC THE MINISTER FOR MINERAL RESOURCES FOR AND ON BEHALF OF THE STATE OF NEW SOUTH WALES ("Government party")

and VICTOR PERRY ("native title party"), acting for and on behalf of herself/himself/themselves and all persons on whose behalf the native title claim is made

and POWERCOAL PTY LTD ACN 052 533 070 being a company incorporated in the State of New South Wales having its registered office at 244 Pacific Highway Charlestown NSW 2290 ("grantee party")

RECITALS

A. The grantee party has made application for the mining lease.

B. If the grant of the mining lease affects native title it will be a future act which is valid under Subdivision M of Division 3 of Part 2 of the *Native Title Act 1993* (C'th) (the "*Native Title Act*").

C. The Government party has given notice of its intention to grant the mining lease in accordance with section 29 of the *Native Title Act*.

D. The native title party has lodged with the National Native Title Tribunal a native title claim in relation to the land.

E. The native title claim has been entered in the Register of Native Title Claims and the native title party is a registered native title claimant but the registration test has not been applied.

F. The parties have negotiated under Subdivision B, Division 3, Part 2 (prior to 30 September 1998) and Subdivision P, Division 3, Part 2 (after 30 September 1998) of the *Native Title Act* in relation to the Government party's intention to grant the mining lease.

G. The native title party agrees to the grant of the mining lease and this Deed is entered into for the purpose of ensuring the validity of the mining lease under the *Native Title Act*.

007.015.044.0044

OPERATIVE PROVISIONS

INTERPRETATION

1.1 In this Deed unless the contrary intention appears:

"ancillary agreement" means any existing or future agreement (including, without limitation, the agreement(s) (if any) noted in the Schedule) made between a native title party and the grantee party or any other person in connection with the grant of the tenement(s) and/or the grantee party exercising its rights and discharging its obligations under the tenement(s);

"mining lease" means the mining lease to be granted pursuant to the application described in the Schedule;

"National Native Title Tribunal", "native title", "native title party", "relevant Minister", "Register of Native Title Claims" and "registered native title claimant" have the same meaning as they have in the *Native Title Act*.

"native title claim" means an application for determination of native title described in the Schedule;

"subject land" means the land the subject of the mining lease application;

"tenement" means the mining lease to be granted pursuant to the application described in the Schedule.

1.2 In this Deed, unless the contrary intention appears;

(a) the word person includes a firm, body corporate, statutory corporation, an unincorporated association or an authority and a reference to a gender includes each other gender;

(b) the singular includes the plural and vice versa;

(c) a reference to a person includes a reference to the person's executors; administrators, successors, substitutes (including but not limited to persons taking by novation) and assigns;

(d) an agreement, representation or warranty on the part or in favour of two or more persons binds or is for the benefit of them jointly and severally;

(e) a reference to anything is a reference to the whole or any part of it and a reference to a group of persons is a reference to any one or more of them.

(f) the expression "the native title party" includes each and every native title party in relation to the subject land and the grant of the mining lease.

AUTHORITY TO ENTER INTO DEED

2. The native title party represents and warrants that all necessary authorisations have been obtained to enter into this Deed and this Deed is valid and binding and enforceable in accordance with its terms and against each native title party and all the persons on whose behalf the respective native title claim is made.

AGREEMENT TO GRANT OF TENEMENT

3. The native title party:

(a) agrees to the grant of the mining lease and to the grantee party exercising its right and discharging its obligations under the mining lease; and

(b) acknowledges that this Deed is an agreement for the purpose of section 28(1)(f), section 31(1)(b) and section 41A of the *Native Title Act*.

LODGEMENT WITH THE NATIONAL NATIVE TRIBUNAL

4. The Government party is authorised on behalf of the parties to give a copy of this Deed to the National Native Title Tribunal as the arbitral body pursuant to section 41A of the *Native Title Act* and to advise the Commonwealth Minister in writing of the making of this Deed of Agreement.

COMPENSATION TO BE SET OFF

5.1 This clause 5 applies if a native title party:

(a) receives or is entitled to receive from the grantee party or any other person any compensation, benefit or consideration ("compensation entitlement") whether under any ancillary agreement or otherwise; and

(b) makes any claim for compensation, damages or other relief whatsoever against the Government party or any officer or agency of the Government party ("compensation claim")

in connection with the grant of the mining lease and/or the grantee party exercising its rights or discharging its obligations under the mining lease and their claimed effect on any native title rights of the native title party, whether the compensation claim arises under *Native Title Act* or otherwise.

5.2 Each native title party agrees that any compensation entitlement is to be taken into account in determining any compensation claim and is to be set off against any compensation claim whether that claim is determined by agreement of the parties or a court or tribunal or body having jurisdiction or power to make a determination in relation to the compensation claim.

5.3 Each native title party and the grantee party agree that at the request of the Government party they:

(a) will provide full particulars including a statement of account of the compensation entitlement; and

(b) produce for inspection and copying any document (as that word is defined in the dictionary to the *Evidence Act 1995* (C'th)) relating to the compensation entitlement including without limitation any ancillary agreement.

5.4 The benefits (including any financial benefits to be provided by or under any ancillary agreement) constitute full compensation within the meaning of Division 5 of Part 2 of the *Native Title Act* or any other Act (whether of the Commonwealth or the State) for the creation of a right to mine the land and for any consequential impairment of any native title rights and interests.

GOVERNMENT PARTY NOT LIABLE FOR ANCILLARY AGREEMENT

6. Each native title party and the grantee party acknowledge that neither the Government party nor their officers, employees or agents have any obligation or liability whatsoever in connection with the rights and obligations of a native title party or the grantee party under an ancillary agreement.

DEED AND ANCILLARY AGREEMENT NOT CONDITIONS OF GRANT

7. The provisions of the Deed and of any ancillary agreement are not conditions of the grant of the mining lease under the *Mining Act 1992*.

DEED PREVAILS

8. The grantee party and each native title party acknowledge that the provisions of this Deed prevail over the provisions of any ancillary agreement to the extent of any inconsistency.

NO ACKNOWLEDGEMENT OF NATIVE TITLE

9. By entering into this Deed the Government party does not acknowledge the existence of native title to the subject land.

EFFECT UPON NATIVE TITLE RIGHTS

10. By entering into this Deed the rights (if any) of each native title party in connection with the claimed native title to the subject land are not affected except as is provided for in, and to the extent necessary to give effect, to this Deed.

INDEMNITY

11. The grantee party will indemnify the Crown in right of New South Wales, and will keep it indemnified against all costs including legal costs on an indemnity basis, compensation and damages incurred or suffered, directly or indirectly, by the Crown in relation to the grant of the mining leases as a result of any person establishing that:

    (a) the notice issued pursuant to section 29 of the Native Title Act is in any way defective or invalid and that he or she is entitled to payment of compensation from the Crown whether under the Native Title Act or any other law as a consequence of his or her having such interests; or

    (b) he or she is entitled to damages against the Crown in right of New South Wales, it successors, ministers, officers, servants and agents, in relation to the grant of the mining leases in derogation of the rights of a native title holder.

GENERAL

12.1 Each party agrees, at its own expense, on the request of another party, to do everything reasonably necessary to give effect to this Deed and the matters contemplated by it.

12.2 Each party will pay its own legal and other costs and expenses in connection with the preparation and completion of this Deed, except for stamp duty. The grantee party is to pay all stamp duty (including fines or penalties) payable on or with respect to this Deed.

12.3 This Deed is governed by the law in force in the State of New South Wales.

SIGNED SEALED AND DELIVERED BY THE HONOURABLE EDWARD OBEID OAM, MLC THE MINISTER FOR MINERAL RESOURCES FOR AND ON BEHALF OF THE STATE OF NEW SOUTH WALES

in the presence of

_____
Signature of Witness

_____
Signature of Government Party

_____
Name of Witness (block letters)

THE COMMON SEAL OF POWERCOAL PTY LIMITED WAS AFFIXED IN THE PRESENCE OF:

_____
(Name of grantee party)
in the presence of:

_____
Signature of grantee party

_____
Signature of Witness

_____
Name of Witness (block letters)

SIGNED SEALED AND
DELIVERED BY

(Name of native title party)
in the presence of:

Signature of native title party

Signature of Witness

Name of Witness
(block letters)

007.015.044.0050

DEED FOR GRANT OF MINING LEASE
Native Title Act 1993 (C'th)
Sections 28(1)(f) and 41A

SCHEDULE

1.	Mining Lease	:	
	Application Number	:	97 Singleton
	Grantee Party	:	Powercoal Pty Ltd ACN 052 533 070
2.	Native Title Claim	:	NC 98/6
	Native Title Party/Parties	:	Victor Perry on behalf of the Woonarua People
3.	Ancillary Agreement	:	
	Parties	:	Powercoal Pty Ltd ACN 052 533 070, Victor Perry, New South Wales Aboriginal Land Council and Stephen Seiver
	Date	:	

007.015.044.0051

SCHEDULE 4

INDIGENOUS LAND USE AGREEMENT

007.015.044.0052

ILUA AREA AGREEMENT

Date:

POWERCOAL PTY LIMITED

VICTOR PERRY

STEPHEN SEIVER

NEW SOUTH WALES ABORIGINAL LAND COUNCIL

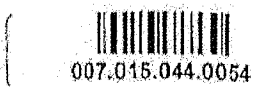


Clayton Utz
Lawyers
No. 1 O'Connell Street
Sydney NSW 2000

Native Title Unit
NSW Aboriginal Land Council
33 Argyle Street
Parramatta NSW 2150

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ILUA AREA AGREEMENT

DEED made on 1999

BETWEEN POWERCOAL PTY LTD. ACN 052 533 070 of 244 Pacific Highway, Charlestown NSW 2290 ("Powercoal")

AND VICTOR PERRY of 14 Kent Street, Singleton NSW 2330 on behalf of the Wonnarua People ("Victor Perry")

AND STEPHEN SEIVER in his capacity as the person whose name appears in the entry on the Register of Native Title Claims as the Applicant in relation to the Application for a Determination of Native Title NC98/8 ("Stephen Seiver")

AND NEW SOUTH WALES ABORIGINAL LAND COUNCIL of 33 Argyle Street, Parramatta NSW 2150 ("NSWALC").

RECITALS

A. Powercoal has applied for an extension lease (Mining Lease Application Number 97) in respect of the Newstan Colliery which is within the Area of Interest.

B. Victor Perry is the registered native title claimant in respect of Native Title Determination Application NC 98/6 over the land and waters within the Area of Interest.

C. Stephen Seiver is the registered native title claimant in respect of Native Title Determination Application NC 98/8 over the land and waters within the Area of Interest.

D. Victor Perry on behalf of the Wonnarua People has agreed to consent to the granting of the extension lease referred to in Recital A hereof and to the doing of the other Future Acts within the Area of Interest and with Powercoal and NSWALC has entered into the Master Deed which defines the ongoing relationship between them in respect of the Mining Operations and in which they have agreed to execute this Deed and to have it registered as an Indigenous Land Use Agreement (Area Agreement) pursuant to Subdivision C of the Division 3 of Part 2 of the NTA.

E. Stephen Seiver has agreed to consent to the granting of the extension lease referred to in Recital A hereof and to the doing of other Future Acts within the Area of Interest.

F. NSWALC is the representative Aboriginal/Torres Strait Islander body for New South Wales pursuant to section 202(1) of the NTA for the purpose of assisting and representing Aboriginal people in New South Wales with regard to any native title rights or interests held or asserted by such Aboriginal people.

007.015.044.0055

IT IS AGREED AS FOLLOWS:-

1. DEFINITIONS AND INTERPRETATION

1.1 In this Deed, unless the context otherwise requires:-

"**Area of Interest**" means the area shown edged in black broken lines on the map attached hereto as Schedule 1.

"**Future Act**" means a future act as defined in the NTA which consists of:-

(a) the grant of a Mining Tenement;

(b) the grant or renewal by a Government Authority of any other right in respect of the surface area of the Area of Interest for the purposes of the Mining Operations;

(c) Mining Operations; and

(d) any other act done by Powercoal for the purposes of the Mining Operations.

"**Government Authority**" means any federal, state, or local government, governmental authority, agency, board, court, body or instrumentality including ministers, officers or similar persons having authority to act on its behalf.

"**Master Deed**" means the deed entered into between Victor Perry on behalf of the Wonnarua People, Powercoal and the NSWALC and entitled "Master Deed" executed on the date hereof.

"**Mining Operations**" means the underground coal mining operations to be carried out by or under the direction of Powercoal within the Area of Interest, including, without limiting the generality of the foregoing, exploration, developing, designing, constructing, extracting, handling and transporting of coal and other products won from the underground coal mining operations within the Area of Interest and any rehabilitation work within the Area of Interest.

"**Mining Tenement**" means a tenement granted to Powercoal under the *Mining Act* 1992 (NSW) to carry out Mining Operations in the Area of Interest.

"**non-extinguishment principle**" as the same meaning as in the NTA.

"**NTA**" means the *Native Title Act* 1993 (C'th).

"**Parties**" means all or any of the parties to this Deed and Party means any one of them.

007.015.044.0056

1.2 Unless the contrary intention appears in this Deed, the provisions of the Master Deed apply to this Deed mutatis mutandis.

2. CONSENT TO FUTURE ACTS

2.1 Subject to this Deed and to the Master Deed, Victor Perry and Stephen Seiver consent to the doing of the Future Acts.

2.2 Subdivision P of Division 3 of Part 2 of the NTA is not intended to apply and does not apply to the doing of any of the Future Acts.

2.3 The non-extinguishment principle applies to the doing of the Future Acts.

3. REGISTRATION OF THIS DEED

3.1 The Parties agree to the registration of this Deed as an Indigenous Land Use Agreement (Area Agreement) pursuant to Subdivision C of Division 3 of Part 2 of the NTA.

3.2 The Parties intend that this Deed be an agreement meeting the requirements of sections 24CB to 24CE of the NTA and must not raise any objection to the effect that this Deed does not meet those requirements.

3.3 For the purposes of section 24CD of the NTA, the native title group consists of Victor Perry, Stephen Seiver and NSWALC and no other person.

3.4 NSWALC must do all things required in order to satisfy itself that the requirements of sections 202(8)(a) and (b) have been satisfied and when so satisfied must, in performance of its functions under section 202(4)(e), certify the application for registration of this Deed pursuant to section 24CG(3)(a) of the NTA as soon as practicable after the date hereof.

3.5 Any Party may make application to the Native Title Registrar for this Deed to be registered on the Register of Indigenous Land Use Agreements and, for the purposes of regulation 5(2)(A) of the *Native Title (Indigenous Land Use Agreements) Regulations* 1998, this Deed shall constitute a statement by each other Party that he or it agrees to the application being made.

4. TERM

4.1 The term of this Deed shall be from the date hereof until the termination of the Master Deed.

5. ASSIGNMENT

Powercoal is able to assign all or part of its rights under this Deed to another party, provided that other party assumes the obligations of Powercoal under this Deed and the assignor gives notice to Victor Perry and Stephen Seiver of that assignment. This clause 5 does not alter the rights or obligations of Powercoal under the Mining Act 1992 (NSW).

007.015.044.0057

Powercoal may assign any interest which it holds within the Area of Interest provided the assignee acknowledges and accepts in writing that it is bound by the provisions of this Deed and any transactions contemplated by it as if it were a Party and shall assume all the rights and shall observe and perform all of the obligations of Powercoal (to the extent of the interest the subject of the assignment) under or in relation to this Deed which are subsisting at or incurred or arise on and from the date of assignment.

EXECUTED as a Deed.

THE COMMON SEAL of)
POWERCOAL PTY LTD)
was affixed by the authority)
of the Board of Directors in)
the presence of:)

....
(Signature of Secretary/Director) (Signature of Director)

....
(Name of Secretary/Director in Full) (Name of Director in Full)

SIGNED for and on behalf of)
THE WONNARUA PEOPLE)
by VICTOR PERRY in the) .....
presence of:) (Signature)

.....
(Signature of Witness)

.....
(Name of Witness in Full)

007.015.044.0058

SIGNED for and on behalf of)
NEW SOUTH WALES)
ABORIGINAL LAND COUNCIL) .....
by) (Signature)
in the presence of:)

.....
(Signature of Witness)

.....
(Name of Witness in Full)

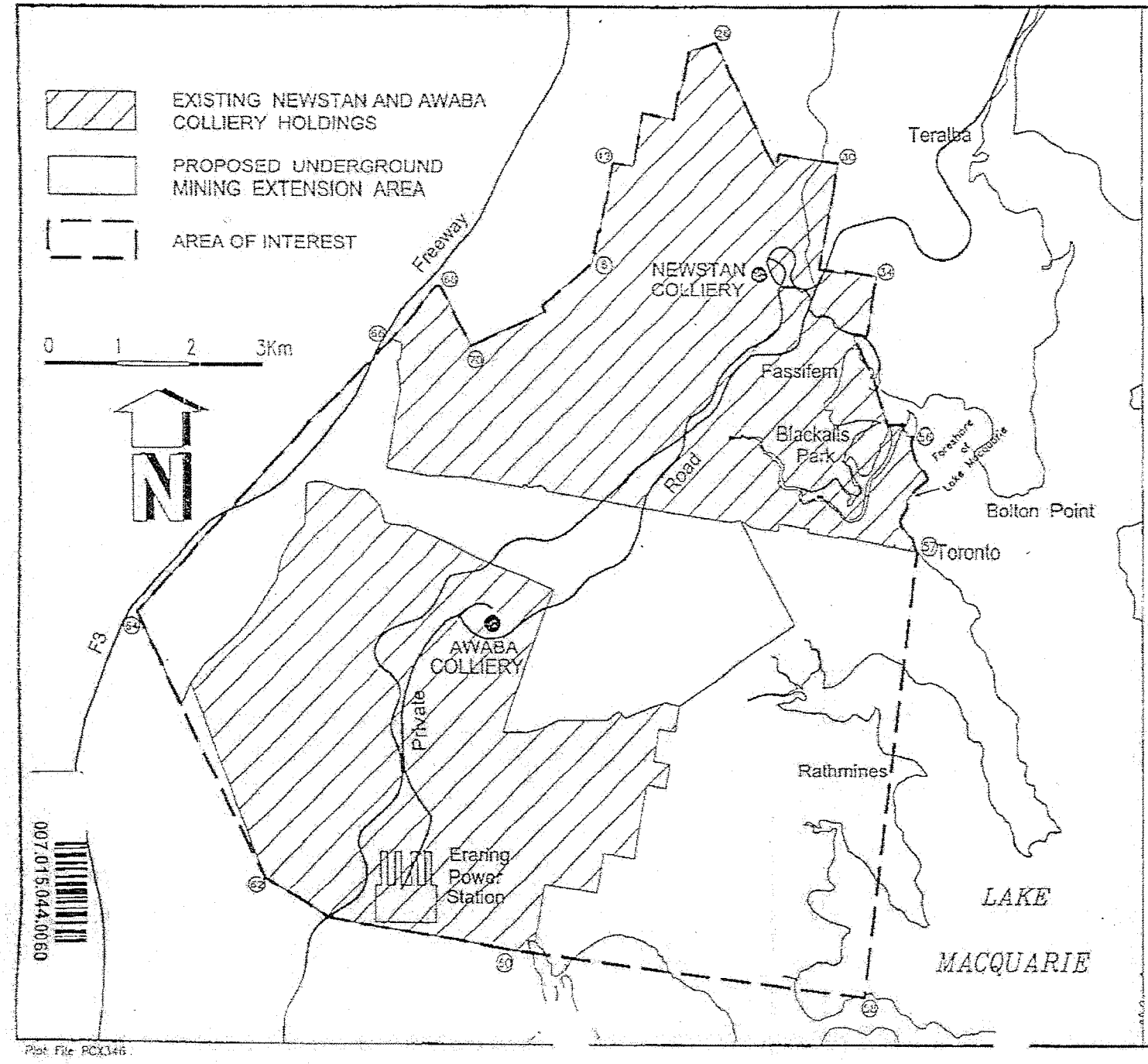
SIGNED by STEPHEN SEIVER)
in the presence of:) .....
(Signature)

.....
(Signature of Witness)

.....
(Name of Witness in Full)

007.015.044.0059

Schedule 1



I.S.G. CO-ORDINATES
ZONE 56/1

Cnr	East	North	Cnr	East	North
1	350358	1348749	37	355045	1348490
2	350586	1348864	38	355023	1348505
3	350556	1348923	39	355005	1348513
4	350838	1349172	40	354991	1348517
5	351096	1349399	41	354976	1348520
6	351250	1349534	42	354945	1348516
7	351326	1349970	43	354913	1348520
8	351351	1349957	44	354878	1348527
9	351354	1349978	45	354875	1348527
10	351423	1350378	46	355170	1347921
11	351438	1350376	47	355369	1347287
12	351530	1350910	48	355598	1347300
13	351801	1350864	49	355607	1347288
14	351821	1350861	50	355590	1347261
15	351952	1351597	51	355596	1347228
16	352390	1351520	52	355613	1347213
17	352455	1351859	53	355637	1347204
18	352510	1351960	54	355652	1347205
19	352540	1352078	55	355645	1347162
20	352580	1352295	56	355734	1347147
21	352613	1352391	57	355789	1345582
22	352602	1352408	58	355044	1339589
23	352656	1352447	59	350369	1340145
24	352758	1352465	60	350173	1340169
25	352758	1352485	61	347590	1340629
26	352985	1352550	62	346744	1341156
27	353807	1350829	63	345606	1343469
28	353848	1351645	64	345000	1344750
29	354086	1351006	65	347365	1347344
30	354679	1350902	66	348476	1348454
31	354418	1349456	67	349085	1349193
32	354786	1349393	68	349145	1349193
33	354792	1349425	69	349262	1348992
34	355211	1349352	70	349582	1348358
35	355067	1348501	71	349747	1348441
36	355063	1348472	72	350156	1348647

PC1243

SCHEDULE 5

ABORIGINAL HERITAGE PROTECTION PROTOCOL

April 1999

ABORIGINAL HERITAGE PROTECTION PROTOCOL

1. THE PARTIES ACKNOWLEDGE THAT:

1.1. Under Commonwealth and New South Wales legislation, Powercoal has certain obligations in relation to the identification of areas of significance for Aboriginal People and, to the extent relevant, implementing management plans for those areas;

1.2. The purpose of this protocol is to co-ordinate the process by which Powercoal will in conjunction with the Wonnarua People undertake the investigations and implement the necessary management plans for areas of significance for the Wonnarua People in the Area of Interest; and

1.3. It is the objective of this protocol to provide for the management and protection of identified areas of significance to the Wonnarua People consistent with Powercoal being able to undertake the Mining Operations with minimal additional cost or delay to Powercoal.

2. SACRED SITES

2.1. Except with the prior consent of the Wonnarua People, Powercoal shall not:

2.1.1. enter upon or undertake any activity likely to damage or interfere with a sacred site where the location of such has been advised to Powercoal or where Powercoal has reasonable grounds for suspecting that the relevant area of land is or includes a sacred site;

2.1.2. move or undertake any activity likely to damage or interfere with any sacred object where the location of such has been advised to Powercoal or where Powercoal has reasonable grounds for suspecting that the relevant object is sacred according to Aboriginal tradition and custom.

2.2. For the purposes of this Protocol, a sacred site or sacred object shall be taken to be damaged or interfered with if:

2.2.1. in the case of a sacred site:

2.2.2. it is used or treated in a manner inconsistent with Aboriginal tradition and custom; or

2.2.3. by reason of anything done in, on or near the site

(a) the use or significance of the site in accordance with Aboriginal tradition and custom is adversely affected; or

(b) passage through or over, or entry upon, the area by any person occurs in a manner inconsistent with Aboriginal tradition and custom; or

2.2.4. in the case of a sacred object, it is used or treated in a manner inconsistent with

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Aboriginal tradition and custom;

2.2.5. and references in this Protocol to damage or interference shall be construed accordingly.

Provided that if Powercoal has acted in accordance with recommendations contained in the EIS Archaeological Assessment, the archaeological survey referred to in clause 9.1(b) of the Master Deed or any further archaeological survey which may be required in respect of the Mining Operations in the Area of Interest, then a sacred site or sacred object will not be taken to be damaged or interfered with for the purposes of this Protocol.

2.3. If at any time, in the course of carrying out the Mining Operations, Powercoal identifies any Aboriginal archaeological or historical site or object, or any site or object which Powercoal reasonably suspects to be a sacred site or sacred object (not being a sacred site or sacred object previously advised to Powercoal) then it shall promptly report the whereabouts of such site or object to the Wonnarua People and comply with the requirements of any applicable law and the terms of this clause 2.

2.4. Where, contrary to the provisions of this clause 2, Powercoal deliberately or negligently enters upon or undertakes any activity, damages or interferes with a sacred site or moves or undertakes any activity which damages or interferes with a sacred object then it shall:

2.4.1. at the option of the Wonnarua People, either take reasonable action to restore the sacred site or sacred object in accordance with the directions of the Wonnarua People or reimburse the Wonnarua People for the reasonable costs incurred by the Wonnarua People in restoring or attempting to restore the sacred site or sacred object; and

2.4.2. pay to the Wonnarua People compensation being for any anxiety, anguish, distress, injury, trauma whether spiritual, physical or emotional, caused to any Aboriginal person having any interest in accordance with Aboriginal tradition and custom in the sacred site or sacred object as a result of the deliberate or negligent entry, damage or interference as the case may be, and no compensation shall be dependent on the Wonnarua People having suffered economic loss.

2.5. Where there is a dispute between the parties as to whether or not compensation is payable or as to the amounts of payments to be made pursuant to sub-clause 2.4 hereof, then:

2.5.1. that disagreement shall constitute a dispute for the purposes of clause 16 of the Master Deed; and

2.5.2. if an Arbitrator is to be appointed under clause 16.2 of the Master Deed, the operation of that clause will be modified so that the Arbitrator is the Director General of the National Parks and Wildlife Service or his nominees.

3. ABORIGINAL HERITAGE INVESTIGATION PROCEDURES

3.1. Application

Clause 3 of this protocol will only apply:

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3.1.1. between Powercoal and the Wonnarua People; and

3.1.2. to Mining Operations of Powercoal that may cause any disturbance of land

within the Area of Interest that have not been the subject of previous Mining Operations of Powercoal or for which Aboriginal Heritage Investigation Procedures have not already been carried out.

3.2. Notice

3.2.1. In the event that this clause applies, Powercoal must provide notice to the Wonnarua People at least thirty (30) days prior to it carrying out any Mining Operations which may cause disturbance of land in the area identified in the Notice.

3.2.2. A Notice provided under clause 3.2.1 must include detailed written particulars (including maps, plans and photographs, where appropriate) to identify the area the subject of the proposed Mining Operations.

3.3. Survey

3.3.1. If within 7 days of receipt of a Notice, the Wonnarua People, notifies Powercoal that a survey in accordance with the procedures in clause 3.4 is required in relation to the Notice, the Wonnarua People and Powercoal will consult on the composition and appointment by Powercoal (for ease of administration and making the necessary payments) of a survey team to carry out the Aboriginal Heritage Investigation Procedures.

3.3.2. A survey team may comprise:

(a) an archaeologist;

(b) a surveyor;

(c) a representative of the Wonnarua People; and

(d) a representative of Powercoal.

3.4. Aboriginal Heritage Investigation Procedures

3.4.1. The survey team will as soon as reasonably practicable and in any event within 30 days of the date of this Notice, survey the Nominated Area by:

(a) undertaking a visit to the Nominated Area;

(b) identifying any areas of significance to the Wonnarua People within the Nominated Area.

3.4.2. In the event that the survey team identifies an area of significance to the Wonnarua People within the Nominated Area, then it shall:

(a) consult with Powercoal as to possible methods by which the Mining Operations may be conducted so as to avoid affecting identified areas of significance to the Wonnarua People;

(b) provide to Powercoal and the Wonnarua People, a survey report which will satisfy relevant statutory requirements concerning the identification of sites of significance to Aboriginal People and will contain:

(i) details of the specific locations to be addressed in order to protect each area of significance identified in the Nominated Area;

(ii) details of the ways in which the Mining Operations may affect the areas of significance;

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(iii) the level of importance or significance of the sites identified as areas of significance to the Wonnarua People in the Nominated Area;

(iv) details of ways in which the Mining Operations may be conducted so as to avoid such an effect; and such ways may include:

- preventing access to areas containing sacred sites or sacred objects;
- posting of appropriate notices;
- erection of fences or other barriers;
- diversion of roads;
- notification and protection of sites, objects and other procedures in accordance with any law; and
- keeping information about sacred sites and sacred objects confidential.

(v) recommendations for the management of any identified sites of significance to the Wonnarua People situated in the Nominated Area having regard to the objectives that management of such sites should be carried out in such a way as to:

- enable Mining Operations to occur with minimal additional cost or delay to Powercoal; and
- enable all rights, interests or authorities necessary or convenient for the Mining Operations.

3.5. **Site Protection Measures**

3.5.1. On receipt of the survey report, the Committee will meet to discuss the recommendations in the survey report.

3.5.2. Generally recommendations in a survey report concerning the management and protection of areas of significance to the Wonnarua People will constitute the Site Protection Measures for the site.

3.5.3. If agreement cannot be reached as to the implementation of a recommendation for a Site Protection Measure, then:

(a) that disagreement shall constitute a dispute for the purposes of clause 16 of the Master Deed; and

(b) if an Arbitrator is to be appointed under clause 16.2 of the Master Deed, the operation of that clause will be modified so that the Arbitrator is the Director General of the National Parks and Wildlife Service or his nominee.

3.5.4. Powercoal will undertake Mining Operations, to which this clause applies, in accordance with any Site Protection Measures.

3.6. **Effect of Completion of Aboriginal Heritage Investigation Procedures**

The Wonnarua People agree that once Aboriginal Heritage Investigation Procedures have been completed in respect of a Nominated Area:

3.6.1. they will not (and agree to use their best endeavours to ensure that no other person will) bring or pursue any claims in respect of the presence of areas of significance to the Wonnarua People or to Aboriginal people within the Nominated Area under any Commonwealth or New South Wales legislation or at law; and

3.6.2. Powercoal will be allowed to proceed with carrying out the Mining Operations on the Nominated Area without interruption.

4. CULTURAL AWARENESS TRAINING

4.1. Powercoal will, provide an induction program to members of its staff in relation to Aboriginal cultural awareness and the protection and management of areas of significance to the Wonnarua People that are identified in accordance with clause 3 of this Protocol.

5. INTERPRETATION

5.1. For the purposes of this Protocol:

Aboriginal Heritage Investigation Procedures means archaeological and other necessary studies regarding Aboriginal people, required to be carried out, under Commonwealth or New South Wales legislation, prior to commencing Mining Operations which may cause disturbance of land and the archaeological survey referred to in clause 9.1(b) of the Master Deed.

EIS Archaeological Assessment means the archaeological assessment by Umwelt (Australia) Pty Limited and dated November 1998 which is Appendix 8 to the Environmental Impact Statement dated November 1998 prepared in respect of the area of the Newstan Extension Lease.

Nominated Area means that area of land in the Area of Interest, which is referred to in a Notice.

Master Deed means the Deed of Agreement between Victor Perry, on behalf of the Wonnarua People, Powercoal Pty Limited and NSW Aboriginal Land Council made on the date hereof.

Notice means a notice provided by Powercoal under clause 3.2.1 of this Protocol.

Sacred Object means an object (including Aboriginal remains) of particular significance to Aboriginals in accordance with Aboriginal tradition and custom.

Sacred Site means a site or area of land (whether underwater or otherwise) or of water that is sacred to Aboriginals or is otherwise of significance according to Aboriginal tradition and custom, and includes any land or water that, under a law of the Commonwealth or New South Wales, is registered or declared as being sacred to Aboriginals or of significance according to Aboriginal tradition and custom.

Site Protection Measures means any measures agreed under clause 3.5 of this Protocol.

5.2. Unless the context otherwise provides, words used in this Protocol will have the meaning given to them in the Master Deed.

007.015.044.0066

SCHEDULE 6

ADDRESSES OF THE PARTIES

Address of Victor Perry	-	14 Kent Street Singleton NSW 2330
Address of Powercoal	-	244 Pacific Highway Charlestown NSW 2290 Facsimile No.: 02 4942 1398
Address of NSWALC	-	9th Floor 33 Argyle Street Parramatta NSW 2150 Facsimile No.: 02 9687 1234

007.015.044.0068

APPENDIX 3

Results of AHIMS Search

AHIMS Web Services (AWS)
Search Result

Purchase Order/Reference : 4660

Client Service ID : 436318

Umwelt (Australia) Pty Limited

Date: 19 July 2019

75 York Street
Teralba New South Wales 2284

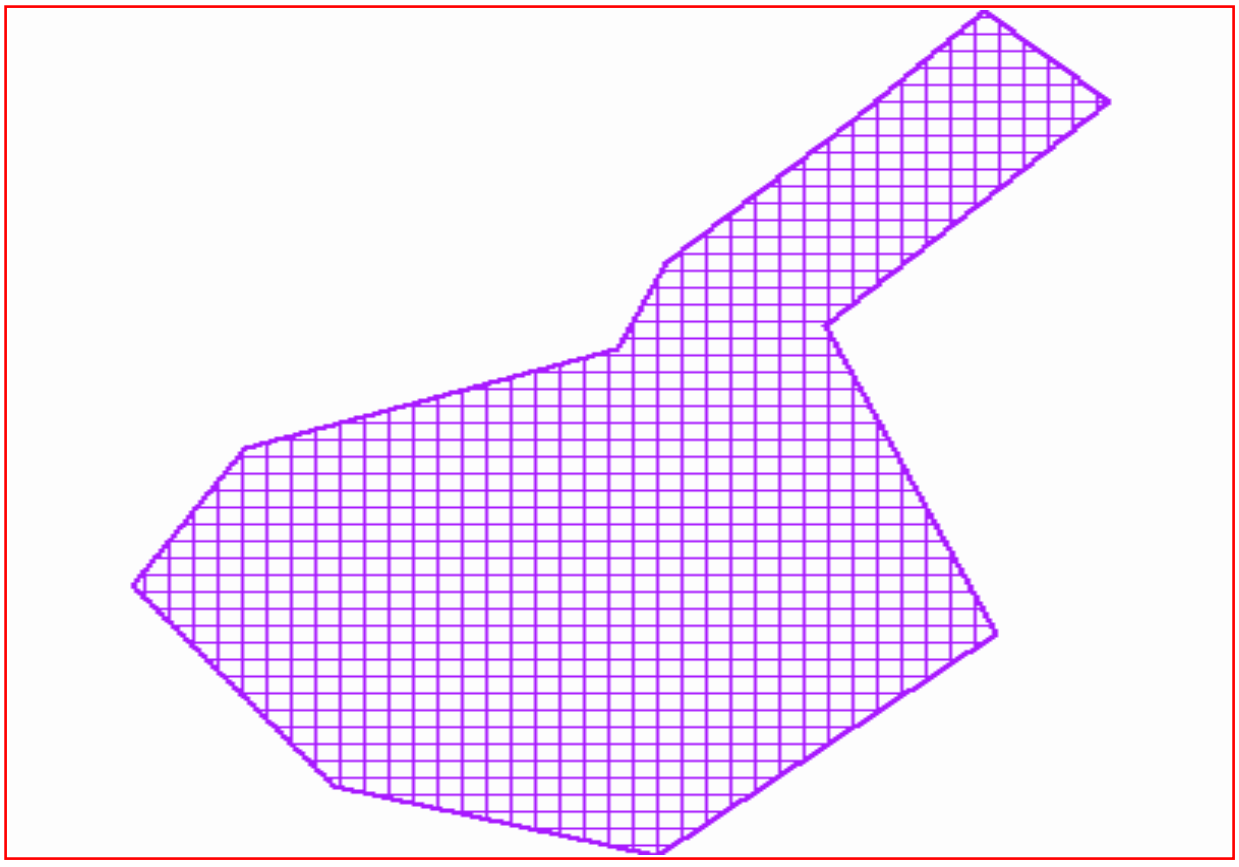
Attention: Karyn Virgin

Email: kvirgin@umwelt.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Search using shape-file AHIMS SEARCH AREA.SHP with a buffer of 0 meters. Additional Info : research, conducted by Karyn Virgin on 19 July 2019.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

3 Marist Place, Parramatta NSW 2150
Locked Bag 5020 Parramatta NSW 2220
Tel: (02) 9585 6380 Fax: (02) 9873 8599

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

SITE_ID	SITE_NAME	PRIMLOC_ME	GENERAL_RE	VALIDITY_S	FEATURE_TY	IMPORTANCE	FEATURE_NU	CMA_ID	LANDFORM_I	EPRD_ID	LAND_USE_I	ADMIN_ID	LGA_ID	LALC_ID	MAPSHEET_I	SHAPE_FID
45-7-0147	Eraring;	1:25k Topographic Map	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	0	6	1026	1	0	19	92	44	2680	1372776
45-7-0070	Eraring;Crooked Creek;	1:250,000 (Imperial)	0	VAL	Shell	Not Determined	0	6	1026	1	0	19	92	44	2680	1372706
45-7-0070	Eraring;Crooked Creek;	1:250,000 (Imperial)	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2680	1372706
45-7-0077	Sandy Creek;	1:250,000 (Imperial)	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2680	1372713
45-7-0004	Eraring Power Stn;Lake View;	1:250,000 (Imperial)	0	VAL	Shell	Not Determined	0	6	0	1	0	19	92	44	2680	1372640
45-7-0004	Eraring Power Stn;Lake View;	1:250,000 (Imperial)	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1372640
45-7-0005	Awaba Railway Stn;Toronto; same as 45-7-0310	1:250,000 (Imperial)	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1372641
45-7-0005	Awaba Railway Stn;Toronto; same as 45-7-0310	1:250,000 (Imperial)	0	VAL	Grinding Groove	Not Determined	0	6	0	1	0	19	92	44	2680	1372641
45-3-0905	Sandy Creek;Sunday Creek;	1:250,000 (Imperial)	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2682	1365059
45-3-0908	Old Maitland Road;Jigadee Creek;	1:250,000 (Imperial)	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2682	1365062
45-7-0241	Awaba 1	Differential GPS	0	VAL	Artefact	Contributes to Primary Importance	3	6	1026	1	737	19	92	44	2680	1372851
45-3-3307	AA7	Non-Differential GPS	0	VAL	Artefact	Not Determined	4	6	1026	1	0	19	92	44	2682	1366992
45-3-3373	AA2	Non-Differential GPS	0	VAL	Artefact	Not Determined	2	6	1026	1	0	19	92	44	2682	1367058
45-3-3374	AA3	Non-Differential GPS	0	VAL	Artefact	Not Determined	2	6	1026	1	0	19	92	44	2682	1367059
45-7-0261	Stockyard Creek AS with PAD (Swansea)	Differential GPS	0	VAL	Potential Archaeological Deposit (PAD)	Not Determined	0	6	0	1	0	19	92	44	2680	1372871
45-7-0261	Stockyard Creek AS with PAD (Swansea)	Differential GPS	0	VAL	Artefact	Not Determined	41	6	0	1	0	19	92	44	2680	1372871
45-7-0288	RPS BH 1	Non-Differential GPS	1	VAL	Aboriginal Ceremony and Dreaming	Not Determined	0	6	0	1	0	19	92	44	2680	1434330
45-7-0286	RPS MB 1	Non-Differential GPS	0	VAL	Shell	Not Determined	0	6	0	1	0	19	92	44	2680	1434310
45-7-0312	RPS NEWST 19	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1447680
45-7-0313	RPS NEWST 20	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1447690
45-3-3443	RPS NEWST23	Non-Differential GPS	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	0	6	1026	1	0	19	92	44	2682	1452190
45-7-0304	RPS NEWST 11	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446540
45-7-0305	RPS NEWST 12	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446590
45-7-0306	RPS NEWST 13	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446600
45-7-0307	RPS NEWST 14	Non-Differential GPS	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	0	6	1026	1	0	19	92	44	2680	1446610
45-7-0309	RPS NEWST 16	Non-Differential GPS	0	DSY	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446630

45-7-0310	RPS NEWST 17, same as 45-7-0005	Non-Differential GPS	0	VAL	Habitation Structure	Not Determined	0	6	0	1	0	19	92	44	2680	1446640
45-7-0311	RPS NEWST 18	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2680	1446650
45-7-0318	RPS ST01	Differential GPS	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	0	6	1026	1	0	19	92	44	2680	1454690
45-7-0319	RPS ST02	Differential GPS	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	0	6	1026	1	0	19	92	44	2680	1454700
45-7-0294	RPS NEWST 1	Differential GPS	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	0	6	0	1	0	19	92	44	2680	1446360
45-7-0295	RPS NEWST 2	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446370
45-7-0296	RPS NEWST 3	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2680	1446380
45-7-0297	RPS NEWST 4	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2680	1446390
45-7-0298	RPS NEWST 5	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2680	1446400
45-7-0299	RPS NEWST 6	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446410
45-7-0300	RPS NEWST 7	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446420
45-7-0301	RPS NEWST 8	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446430
45-7-0302	RPS NEWST 9	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1446440
45-7-0303	RPS NEWST 10	Non-Differential GPS	0	VAL	Artefact	Not Determined	0	6	1026	1	0	19	92	44	2680	1446450
45-7-0335	AWMF Pipeline PAD2	Non-Differential GPS	0	VAL	Potential Archaeological Deposit (PAD)	Not Determined	1	6	0	1	0	19	92	44	2680	1480720
45-7-0336	AWMF Pipeline PAD 1	Non-Differential GPS	0	VAL	Potential Archaeological Deposit (PAD)	Not Determined	1	6	0	1	0	19	92	44	2680	1480730
45-7-0324	RPS COALLOG1	Non-Differential GPS	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	1	6	1026	1	0	19	92	44	2680	1476140
45-7-0327	AWTF_ST1, TP7	1:25k Topographic Map	0	DEL	Modified Tree (Carved or Scarred)	Not Determined	0	6	0	1	0	19	92	44	2680	1476190
45-7-0327	AWTF_ST1, TP7	1:25k Topographic Map	0	DEL	Potential Archaeological Deposit (PAD)	Not Determined	0	6	0	1	0	19	92	44	2680	1476190
45-7-0327	AWTF_ST1, TP7	1:25k Topographic Map	0	DEL	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1476190
45-7-0330	AWABA AWT IF1	Non-Differential GPS	0	VAL	Artefact	Not Determined	1	6	1026	1	0	19	92	44	2680	1480140
45-7-0331	AWTF ST1 TP7	Non-Differential GPS	0	PDSY	Artefact	Not Determined	1	6	0	1	0	19	92	44	2680	1480150
45-7-0331	AWTF ST1 TP7	Non-Differential GPS	0	PDSY	Potential Archaeological Deposit (PAD)	Not Determined	1	6	0	1	0	19	92	44	2680	1480150
45-7-0331	AWTF ST1 TP7	Non-Differential GPS	0	PDSY	Modified Tree (Carved or Scarred)	Not Determined	1	6	0	1	0	19	92	44	2680	1480150
45-7-0332	AWTF ST2	Non-Differential GPS	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	1	6	1026	1	0	19	92	44	2680	1480160
45-7-0333	AWTF ST3	Non-Differential GPS	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	1	6	1026	1	0	19	92	44	2680	1480170
45-7-0328	RPS NEWST 24	Non-Differential GPS	1	VAL	Water Hole	Not Determined	1	6	0	1	0	19	92	44	2680	1477060
45-7-0329	RPS NEWST 24A	Non-Differential GPS	0	VAL	Water Hole	Not Determined	1	6	1026	1	0	19	92	44	2680	1480120
45-7-0323	AWMF Pipeline Midden 1	Differential GPS	0	VAL	Shell	Contributes to Primary Importance	50	6	0	1	0	19	92	44	2680	1471520

45-7-0325	AWTF_ST2	1:25k Topographic Map	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	0	6	1026	1	0	19	92	44	2680	1476150
45-7-0326	AWTF_ST3	1:25k Topographic Map	0	VAL	Modified Tree (Carved or Scarred)	Not Determined	0	6	1026	1	0	19	92	44	2680	1476160
45-7-0358	Myuna Bay Sport and Recreation Centre Artefact Scatter 1 (MBSRC AS1)	Non-Differential GPS	0	DSY	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1570418
45-7-0366	Awaba Waste Treatment Facility 1	Non-Differential GPS	0	DSY	Artefact	Not Determined	0	6	0	1	0	19	92	44	2680	1605364
45-7-0383	Myuna bay	Phone GPS	0	VAL	Shell	Not Determined	0	6	1026	1	0	19	92	44	2680	1629760



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