



13 March 2020

Albury City Council
PO Box 323
ALBURY NSW 2640

Attention: Terri O'Brien, Senior Town Planner

Dear Terri,

Subject: Response to Second Further Information Request – Biodiversity Conservation Division Development Application 10.2017.35576.1 – Extractive Industry ('Rockwood Quarry') and Crushing of Recycled Concrete 208 Winchester Lane, Table Top

Further to the former Office of Environment and Heritage's (now Biodiversity Conservation Division) letter dated 8 May 2019, please find enclosed an updated Aboriginal Cultural Heritage Assessment Report (ACHAR).

Specifically, this amended report provides further details and updated mapping in relation to registered heritage site Mungabareena-mm1 (AHIMS 55-6-0064).

The ACHAR outlines the following in relation to this item:

The archaeological assessment of the study area identified one Aboriginal site within the study area. This Aboriginal site, a modified tree (AHIMS 55-6-0064 mungabareena-mm-1) was unable to be relocated within or immediately adjacent the southern extent of the study area during [an initial] field survey. An Aboriginal Site Impact Recording Form was submitted to the AHIMS Registrar on 26 June 2019. AHIMS 55-6-0064 mungabareena-mm-1 was subsequently listed as destroyed. A later additional ground survey undertaken at the request of DPIE (formerly OEH) to confirm the location or destruction of AHIMS 55-6-0064 identified a scarred tree within the study area some distance west of the coordinate projections provided by AHIMS. This tree is assumed to be AHIMS site 55-6-0064 mungabareena-mm1, whose location was likely miss-recorded. A further update was submitted to AHIMS and at the time of writing was awaiting approval.

No harm to the site is anticipated as it is located outside the area of proposed impact (see Figures 3 and 4) [being some 500 metres away from the nearest works area], however, following consultation with the RAPs it was determined that measures to mitigate any potential harm must be recommended.

Accordingly, the amended ACHAR report includes the following additional recommendation:

Recommendation 1: Protection of mungabareena-mm1 (AHIMS 55-6-0064)

Works must avoid the Aboriginal site identified as mungabareena-mm1 (AHIMS 55-6-0064) as per the current design plans detailed in this report. A minimum 10 metre buffer around the tree should be in place to protect the tree root zone. This buffer should be clearly defined through the installation of fencing around the tree.

Habitat Planning

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Matters regarding biodiversity have also been appropriately addressed via the preparation of a biodiversity assessment and Vegetation Management Plan. Council have advised that they are satisfied that the proposed offsets can be secured and it is expected that this will undertaken via the imposition of condition/s of development consent.

I trust that with the submission of the revised information, the Biodiversity Conservation Division of the NSW Department of Planning, Industry and Environment (NSW DPIE) can now issue their terms of approval.

It is also requested that Council liaise with NSW DPIE to arrange a meeting date for the Joint Regional Planning Panel to hear this matter.

If you require any further information, please do not hesitate to contact the undersigned directly on 6021 0662.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Matt Johnson', with a stylized flourish at the end.

Matt Johnson
Senior Planner

Encl

Rockwood Quarry, Additional Areas
208 Winchester Lane, Table Top:
Aboriginal Cultural Heritage Assessment
Report
Aboriginal cultural heritage assessment report

FINAL REPORT

Prepared for Habitat Planning on behalf of A.P. Delaney & Co Pty Ltd

12 March 2020

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- Matt Johnson (Habitat Planning)
- Jarrod Kennedy
- Peter Clegg
- Raymond Kennedy
- Rob Clegg (Wiradjuri)
- Sam Kirby (ALALC)
- Stephen Clegg
- Uncle Ken "Tunny" Murray
- Yalmambirra

Biosis staff involved in this project were:

- Meaghan Aitchison
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- Christine Morgan

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Glossary

ACHAR	Aboriginal Cultural Heritage Assessment Report
AHIMS	Aboriginal Heritage Information Management System
the code	Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (2010)
DA	Determining Authority
DECCW	Department of Environment, Climate Change and Water (now OEH)
DP	Deposited Plan
DPIE	NSW Department of Planning, Industry and Environment (formerly OEH)
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
GDA	Geocentric Datum of Australia
GPS	Global Positioning System
GSV	Ground Surface Visibility
ICOMOS	International Council on Monuments and Sites
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
MGA	Map Grid of Australia
NHL	National Heritage List
NNTT	National Native Title Tribunal
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NPWS	National Parks and Wildlife Service
NSW	New South Wales
NTSCORP	Native Title Services Corporation
OEH	NSW Office of Environment and Heritage
PAD	Potential Archaeological Deposit
RAPs	Registered Aboriginal Parties
REF	Review of Environmental Factors
REP	Regional Environmental Plan
SEPP	State Environmental Planning Policy

Summary

Biosis Pty Ltd was commissioned by Habitat Planning on behalf of A. P. Delaney & Co Pty Ltd to undertake an Aboriginal cultural heritage assessment (ACHA) for the proposed extension of Rockwood Quarry (Figure 1). The study area is located approximately 10.9 kilometres north-east of Albury and approximately 10.9 kilometres north-east of the Albury central business district (CBD).

One Aboriginal cultural heritage site (AHIMS 55-6-0064) is registered with the Aboriginal Heritage Information Management System (AHIMS) register within the study area. OEH considers there to be potential for Aboriginal cultural heritage to occur within the proposed study area given the close proximity of indicative landscape features, such as watercourses, and the existence of additional nearby known sites (artefact scatters and scarred trees). OEH has also noted that there are areas of remnant native vegetation in the study area that may contain scarred trees.

Albury City Council is the Determining Authority (DA) and will assess Environmental Impact Statement (EIS) to help them determine if the proposed development is likely to have a significant effect on the environment, including Aboriginal cultural heritage.

Consultation

The Aboriginal community was consulted regarding the heritage management of the project throughout its lifespan. Consultation has been undertaken as per the process outlined in the DECCW document, *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a) (consultation requirements). The appropriate government bodies were notified and advertisements placed in the Border Mail newspaper (21 July 2018), which resulted in the following Aboriginal organisations registering their interest (Table 1):

Table 1 List of registered Aboriginal parties and group contact

Organisation	Contact person
Albury and District Local Aboriginal Land Council	Sam Kirby
Yalmambirra	Yalmambirra
Dadi Dadi Weki Weki Aboriginal Corporation	Raymond Kennedy

A search conducted by the Office of the Registrar, *Aboriginal Land Rights Act 1983* listed no Aboriginal Owners with land within the study area. A search conducted by the National Native Title Tribunal (NNTT) listed no Registered Native Title Claims, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area.

Upon registration, the Aboriginal parties were invited to provide their knowledge on the study area and on the proposal provided in Methodology for Test Excavations. The responses identify the study area as an area of low significance. Responses from the Registered Aboriginal Parties (RAPs) are included in Appendix 3.

Site officers from elected RAPs participated in the field survey and did not provide comment on the study area with regard to the proposal.

The outcome of the consultation process was that the RAPs considered the study area to have a low level of cultural significance, although that significance was not clearly defined and specific examples were not provided. The results of the consultation process are included in this document.

The recommendations that resulted from the consultation process are provided below.

Results

The ACHA assessment undertook background research for the proposed study area. Key considerations arising from the background research include:

Strategies have been developed based on the archaeological (significance) of cultural heritage relevant to the study area. The strategies also take into consideration:

- Predicted impacts to Aboriginal cultural heritage
- The planning approvals framework
- Current best conservation practice, widely considered to include:
 - Ethos of the Australia International Council on Monuments and Sites (ICOMOS) Burra Charter
 - The *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water, 2010b) (the code)

One previously registered Aboriginal heritage site mungabareena-mm1 (AHIMS 55-6-0064) is located within the study area. Biosis undertook two field surveys and subsurface test excavations which identified no new Aboriginal heritage sites within the study area.

Management recommendations

Prior to any development impacts occurring within the study area, the following is recommended:

Recommendation 1: Protection of mungabareena-mm1 (AHIMS 55-6-0064)

Works *must* avoid the Aboriginal site identified as mungabareena-mm1 (AHIMS 55-6-0064) as per the current design plans detailed in this report. A *minimum* 10 metre buffer around the tree should be in place to protect the tree root zone. This buffer should be clearly defined through the installation of fencing around the tree.

Recommendation 2: No further assessment is required

No further archaeological investigation or works are required to be undertaken for the study area. Should the proposed works extend beyond the current design plans, further archaeological assessment will be required. This would include consultation with RAPs and may include further archaeological survey.

In the event that unexpected find, including human remains, are unearthed during any phase of the project please refer to Recommendations 2 and 3 below.

Recommendation 3: Stop work provision for any potential heritage sites identified during the project

All Aboriginal places and objects are protected under the NPW Act. This protection extends to Aboriginal objects and places that have not been identified but might be unearthed during construction.

If construction proceeds without an approved AHIP, work must cease if Aboriginal objects or places are identified. If an Aboriginal object is discovered and/or harmed in, or under the land, while undertaking development activities, the proponent must:

- Immediately cease work at the location
- Secure the area to ensure no further harm to the Aboriginal object
- Notify OEH as soon as practical on 131555, providing details of the Aboriginal object and its location

- Not recommence works without authorised in writing by OEH

Historical archaeological sites are protected under the relics provisions (s139 – 146) of the NSW *Heritage Act 1977*. Should any historical archaeological sites be identified during any phase of the proposed development, all works must cease in the vicinity of the find and the project archaeologist and A. P. Delaney & Co. Pty Ltd notified. Should the archaeological nature of the find be confirmed the Heritage Branch of the NSW Department of Planning, will require notification.

Recommendation 4: Stop work provision for any potential discovery of human remains

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the activity area must follow these steps:

1. **Discovery:** If suspected human remains are discovered all activity in the vicinity must stop IMMEDIATELY to ensure minimal damage is caused to the remains; and the remains must be left in place, the area secured to prevent unauthorised access and the remains protected from harm or damage.
2. **Notification:** Once suspected human skeletal remains have been found, the NSW Police and Coroner's Office must be notified immediately. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and OEH NSW. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW will be notified of the find under s.146 of the *Heritage Act 1977*.

Recommendation 5: Continued consultation with the registered Aboriginal stakeholders

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010), it is recommended that the proponent provides a copy of this draft report to the Aboriginal stakeholders and considers all comments received. The proponent should continue to inform these groups about the management of Aboriginal cultural heritage within the Study Area throughout the life of the project.

1 Introduction

1.1 Project background

Biosis Pty Ltd was commissioned by Habitat Planning on behalf of the proponent, A. P. Delaney & Co Pty Ltd to undertake an Aboriginal archaeological investigation for additional areas and activities in relation to the 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW (Figure 1). The NSW Office of Environment and Heritage (OEH) have directed the proponent to conduct an Aboriginal cultural heritage assessment (ACHA) for additional areas and activities in relation to the Rockwood quarry as a part of an Environmental Impact Statement (EIS) (Figure 3).

This report details the investigation, consultation and assessment of Aboriginal cultural heritage undertaken for the study area.

There is one Aboriginal cultural heritage site registered with the Aboriginal Heritage Information Management System (AHIMS) register, both within the study.

Albury City Council is the Determining Authority (DA) and will assess the EIS to help them determine if the proposed development is likely to have a significant effect on the environment, including Aboriginal cultural heritage.

1.2 Study area

The study area is located approximately 10.9 kilometres north east of Albury and is contained within portions of Lot 2 in DP 1018401 and Lot 3 in DP 233061 (Figure 1).

The study area is within the:

- Albury City Local Government Area (LGA).
- Parish of Jindera
- County of Goulburn

The study area is located within and immediately surrounding Rockwood Quarry, 180 metres south west and 270 metres east of Winchester Lane and 730 metres west of Gerogery Road (Figure 2).

1.3 Proposed development

A. P. Delaney & Co Pty Ltd (the proponent) proposes to extend the 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW. The proposed development involves a continuation of an existing extractive industry (Rockwood Quarry), which is currently operating on the subject land, as well as the use of this land to dispose of up to 10,000 tonnes of bio solid waste, the crushing of up to 20,000 tons of recycled concrete and associated ancillary works adjacent existing quarry pits. More specifically, the proponent seeks approval for the continuation of existing extractive industry operations on-site for a period of 30 years, as well as an increase in the annual production of crushed rock from 75,000 cubic metres to 100,000 cubic metres per annum. The quarrying operations onsite are and will continue to be limited to the existing Pit 1 area and an area of 450 metres x 300 metres generally located within the middle of the site surrounding Pit 3. The proposal also includes road embankment works alongside Gerogery Road and the use of an unsealed Crown Travelling Stock Reserve to access Pit 1.

1.4 Planning approvals

The proposed development will be assessed against Part 5 of the *Environmental Planning and Assessment Act 1979* NSW (EP&A Act). Other relevant legislation and planning instruments that will inform this assessment include:

- Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*
- NPW Act
- NSW *National Parks and Wildlife Amendment Act 2010*
- Albury Local Environmental Plan 2010 (LEP)
- Albury Development Control Plan 2010

1.5 Restricted and confidential information

Appendix 1 in the Archaeological Report contains AHIMS information which is confidential and not to be made public. This is clearly marked on the title page for the Appendix.

1.6 Aboriginal cultural heritage

1.6.1 General description

Recent evidence out of the Northern Territory indicates Aboriginal people have inhabited the Australian continent for the last 60,000 years with the Malakanunja II rock shelter dated at 61,000 +9000/-13,000 BP (Clarkson, et al., 2015). In NSW, according to Bowler et al (2003), Aboriginal people have occupied the land for over 42,000 years. However, preliminary evidence presented by Biosis (2016) from a subsurface testing program in south-western NSW suggests Aboriginal people may have occupied the semi-arid zone of the region for 50,000 years.

Without being part of the Aboriginal culture and the productions of this culture it is not possible for non-Aboriginal people to fully understand their meaning to Aboriginal people – only to move closer towards understanding this meaning with the help of the Aboriginal community. Similarly, definitions of Aboriginal culture and cultural heritage without this involvement constitute outsider interpretations.

With this preface Aboriginal cultural heritage broadly refers to things that relate to Aboriginal culture and hold cultural meaning and significance to Aboriginal people (Department of Environment, Climate Change and Water, 2010a). There is an understanding in Aboriginal culture that everything is interconnected. In essence Aboriginal cultural heritage can be viewed as potentially encompassing any part of the physical and/or mental landscape, that is, 'Country' (Department of Environment, Climate Change and Water, 2010a).

Aboriginal people's interpretation of cultural value is based on their "traditions, observance, lore, customs, beliefs and history" (Department of Environment, Climate Change and Water, 2010a). The things associated with Aboriginal cultural heritage are continually / actively being defined by Aboriginal people (Department of Environment and Conservation, 2005; Department of Environment, Climate Change and Water, 2010a). These things can be associated with traditional, historical or contemporary Aboriginal culture (Department of Environment and Conservation, 2005; Department of Environment, Climate Change and Water, 2010a).

1.6.2 Tangible Aboriginal cultural heritage

Three categories of tangible Aboriginal cultural heritage may be defined:

- Things that have been observably modified by Aboriginal people.
- Things that may have been modified by Aboriginal people but no discernible traces of that activity remain.
- Things never physically modified by Aboriginal people (but associated with Dreamtime Ancestors who shaped those things).

1.6.3 Intangible Aboriginal cultural heritage

Examples of intangible Aboriginal cultural heritage would include memories of stories and 'ways of doing', which would include language and ceremonies (DECCW 2010a p.3).

1.6.4 Statutory

Currently Aboriginal cultural heritage, as statutorily defined by the NPW Act, consists of objects and places which are protected under Part 6 of the Act.

Aboriginal objects are defined as:

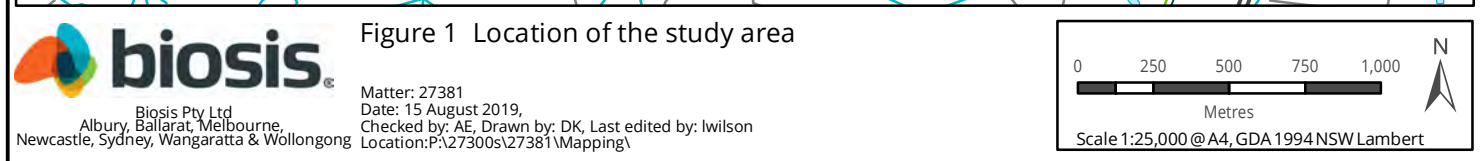
any deposit, object or material evidence...relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains

Aboriginal places are defined as a place that is or was of special Aboriginal cultural significance. Places are declared under section 84 of the NPW Act.

1.6.5 Values

Aboriginal cultural heritage is valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (DECCW 2010a p.iii). More specifically it is used:

- to provide a:
 - 'connection and sense of belonging to Country' (DECCW 2010a p.iii)
 - link between the present and the past (DECCW 2010a p.iii)
- as a learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCW 2010a p.3)
- as further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (DECCW 2010a p.3).



0 250 500 750 1,000

Metres

Scale 1:25,000 @ A4, GDA 1994 NSW Lambert



Legend

 Study area

Figure 2 Location of the study area

0 80 160 240 320 400

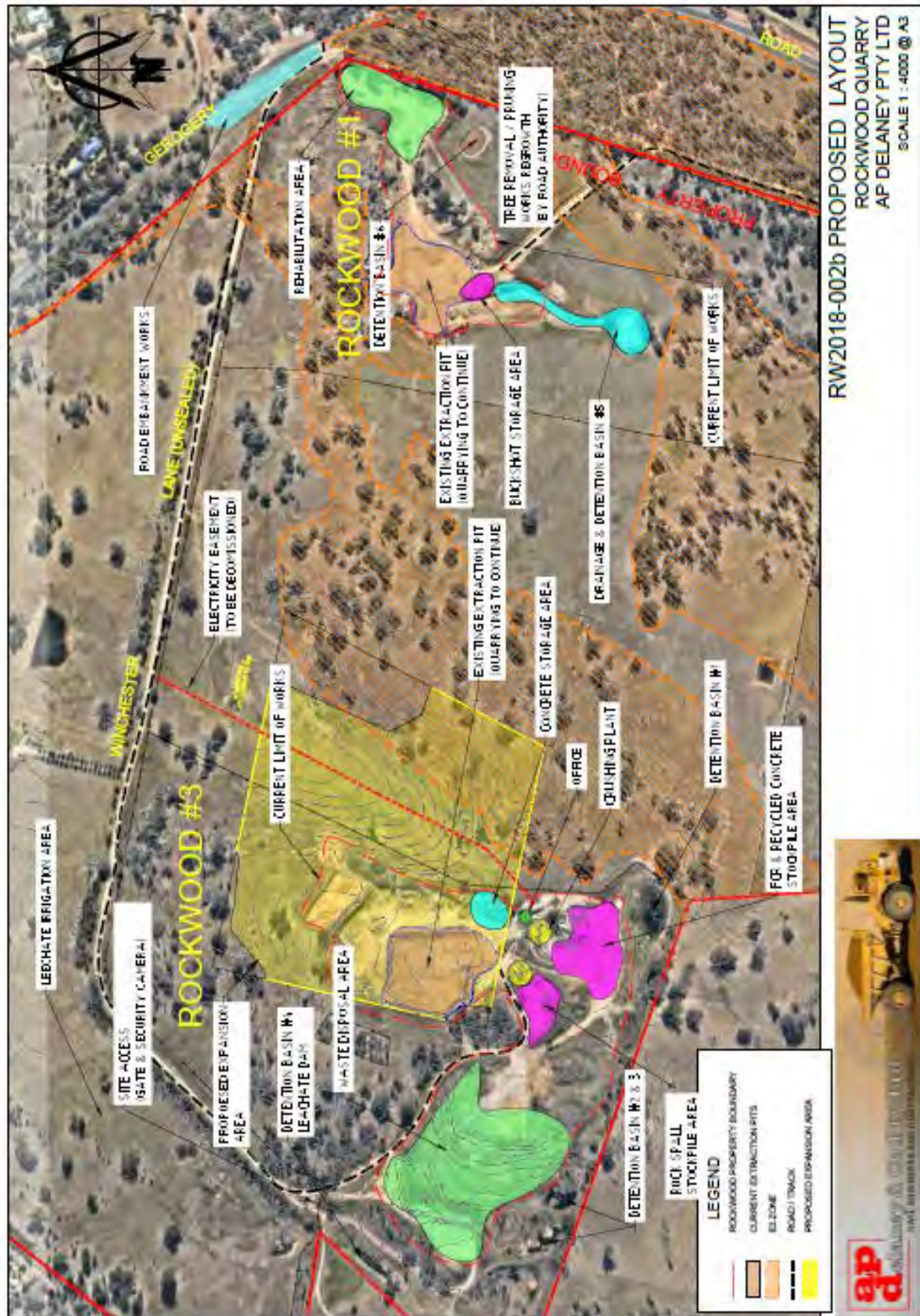
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Coordinate System: GDA 1994 NSW Lambert



Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

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Figure 3 Proposed development



2 Study area context

This section discusses the study area in regards to its landscape, environmental and Aboriginal cultural heritage context. This section should be read in conjunction with the archaeological report attached in Appendix 6. The background research has been undertaken in accordance with the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010).

2.1 Topography and hydrology

The study area overlies the Silurian I-type granites geological formation. This formation is 419 to 443 million years old, with granites formed by the melting of igneous source rocks. Common minerals are quartz, feldspar, and biotite, and include granites between Blayney and Cowra, at Jindabyne and in the Snowy Mountains, north of Albury and between Brewarrina and Gongolgon. Bands of quartz would have been available for use in these areas by Aboriginal people for stone tool manufacture.

The study area is located within the South-West Slopes bioregion and overlies the Burrumbuttock Hills and Foothills (Table 2) as defined in version 2 of the Descriptions for NSW (Mitchell) Landscapes (Mitchell, 2002). Landforms in the study area include undulating foot slopes and the creek bank/terraces of Eight Mile Creek. Soils are typically coarse sandy red-brown earths and local relief varies between 80 to 100 metres. Proportionally, modified trees are most likely to occur within this landscape, although artefact sites are also common. Sub-soil patterns within this bioregion are derived from the underlying weathered rock with alluvial sands and loams generally more common than clays, alluvial clays being more prominent toward the Riverine Plain (Heritage, NSW Office of Environment and, n.d.).

Alluvium stores a considerable amount of water, and it is likely that alluvial deposits have become more extensive since European settlement due to clearing of native vegetation and the subsequent increase in the erosion of topsoil. There is a high potential for Aboriginal cultural heritage to be found *in situ* when it occurs within deep alluvial deposits.

Table 2 Mitchell landscapes within the study area (Mitchell, 2002)

Mitchell landscape	Description
Burrumbuttock Hills and Foothills	Rounded isolated hills with moderate slopes on Silurian-Devonian massive granite and granodiorite, general elevation 300 to 490m, local relief 80 to 100m. Coarse sandy red-brown earths with various species of eucalypt and acacia.

Stream order is recognised as a factor which assists the development of predictive modelling in New South Wales. Predictive models which have been developed for the region have a tendency to favour higher order streams as the locations of campsites as they would have been more likely to provide a stable source of water and by extension other resources which would have been used by Aboriginal groups.

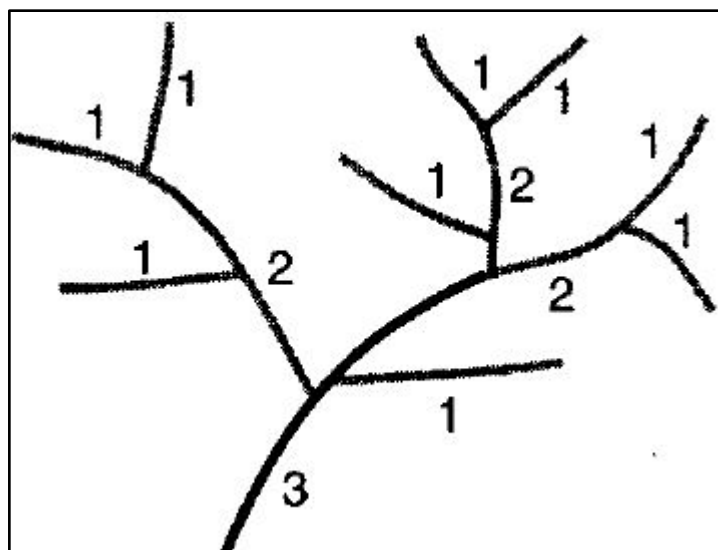


Plate 1 Diagram showing Strahler stream order (Ritter, Kochel, & Miller, 1995, p. 151)

The stream order system used for this assessment was originally developed by Strahler (1952). It functions by adding two streams of equal order at their confluence to form a higher order stream, as shown in Plate 1. As stream order increases, so does the likelihood that the stream would be a perennial source of water. Such a location is likely to contain more complex sites with a high density of artefacts. Lower order streams are also likely to contain large sites within 100 metres of the watercourse.

A non-perennial first order stream drains north from the centre of the study area, where it joins with another unnamed first order watercourse to form a second order stream approximately 1 kilometre north east of the study area. A number of small, unnamed low order streams run approximately 700 metres to the west and 500 metres east of the study area, downslope of the rise on which the study area is located. The non-perennial third order stream, Eight Mile Creek, flows through a valley an average of 750 metres south-west of the study area.

2.2 Landscape resources

The Albury region would have generally provided a number of resources used by Aboriginal inhabitants. Edible plant materials would have been available in close proximity to the study area, including bracken fern, wattles, native plantain and ground orchids (Table 3). Mammals including kangaroo emu, and wallaby would also have provided abundant sources of food. The majority of previously identified artefacts in the local area are comprised of quartz, which is available regionally in exposed reef quartz outcrops (Kelly & Price, 2004, p. 17).

Table 3 Plant Foods Common to the Albury region (Kelly and Price, 2004, p.16)

Common name	Scientific name	Use
Bracken fern	<i>Pteridium escientum</i>	Roots
Wattles	<i>Acacia spp.</i>	Seeds, gums, medicinal barks and hafting timber
Native plantain	<i>Plantago debilis</i>	Leaves processed and eaten

Common name	Scientific name	Use
Common sowthistle	<i>Sonchus oleraceus</i>	Leaves eaten
Milkmaids	<i>Burchardodia umbellata.</i>	Tubers eaten
Vanilla lilies	<i>Arthropodium milleflorum, a. Minus.</i>	Tubers eaten
Bulbine lily	<i>Bulbine bulbosa.</i>	Tubers eaten
Common fringed lily	<i>Thysanotus tuberosus.</i>	Tubers eaten
Ground orchids	<i>Orchideae. Family</i>	Tubers eaten
Murnong	<i>Microseris scapigera</i>	Tubers eaten
Long leaf mat-rush	<i>Lomandra longifolia</i>	Leaf stems eaten, leaves used for weaving
Dwyer's mallee gum	<i>Eucalyptus dwyeri</i>	Roots

Animals such as brush-tailed possums were highly prized for their fur, with possum skin cloaks worn fastened over one shoulder and under the other. Kangaroo teeth were incorporated into decorative items, such as head bands (Attenbrow, 2002). Kangaroos and emus, although providing plenty of meat were harder to kill. Plant resources were more easily collected and could be used in a variety of ways. Roots could be dug all year. The rhizomes or long roots of the bracken fern could be chewed or beaten to a sticky starch (Kelly & Price, 2004, p. 16). Many native lilies, such as the Bulbine and Vanilla lily, had tuberous roots that were collected for food (Patterson, n.d.). Along waterways Long leaf mat-rush was collected and its leaves used for weaving. Gum trees housed witchetty grubs and the bark of many species was used in the provision of shelter; a large sheet of bark being propped against a stick to form a gunyah (Attenbrow, 2002). The Burrumbuttock Hills and Foothills Mitchell Landscape region is characterised by various eucalyptus species, including Dwyer's mallee gum (Mitchell, 2002). Mallee gums were used for food, their roots drained for water, and boomerangs were cut from their wood (Zola & Gott, 1990, p. 30). As well as being important food sources, animal products were also used for tool making and fashioning a myriad of utilitarian and ceremonial items. For example, tail sinews are known to have been used to make fastening cord, while 'bone points', which would have functioned as awls or piercers, are often an abundant part of the archaeological record.

2.3 European land use history

Albury was first described by Europeans in 1838 as:

Generally undulating open forest, tolerably grassed, but not seemingly so sound as is desirable. On the banks of the [Murray ed.] river are swampy flats of rich soil, covered with reeds and reedy grass, but apparently often flooded and ill-drained. Behind these flats, lagoons are frequently met with. Beside these, are forest flats of inferior soils, with less herbage (Walker, 1938)

Albury was built on the northern bank of the Murray River. The original Indigenous name for the aspect of Albury at the foot of Monument Hill was *Bungambrawatha* and Yarrawudda for the area at the western foot of

Eastern Hill. Both of these place names were annotated as such on an 1839 map of the area (Spennemann, 2015). The first post-contact settlement of the area was made by Robert Brown who established a hut and store in 1835 near the confluence of Bungambrawatha Creek and the Murray River, around the same area as an Aboriginal camp site.

European post-contact settlement of the Albury area began in earnest around 1835 with the establishment of the *Mungabareena* run. Squatting increased from 1837 and 1840 when both sides of the Murray were taken up by large grazing runs (Spennemann, 2015).

An early 1892 Parish map shows that the study area was located slightly to the north of the Black Range Gold Fields (Plate 2). The study area is located at the juncture of three 184 to 305 acre land grants to grazier Ancrum Heriot, an early resident of the Albury district. According to parish maps, the land remained within the Heriot family until the 1940s, with land boundaries remaining unchanged (Plate 3).

Quarrying has taken place within the study area since the mid-20th century. A P Delaney & Co Pty Ltd purchased the study area in the early 1970s as a source of hill gravel and rock, at which time it was noted the land had already been in use by the Hume Shire Council as a source of hill gravel. This portion of the study area continues to be used as a granite quarry today. The remainder of the study area has been utilised as grazing land primarily for cattle.



Plate 2 1892 parish map, the approximate location of the study area is shown by the red arrow (NSW LPI)



Plate 3 1940 parish map, the approximate location of the study area is shown by the red arrow (NSW LPI)

3 Aboriginal cultural heritage context

3.1 Ethnohistory

Early documentation of Aboriginal occupation of the Albury area is sparse, with explorers such as Hume and Hovell noting that the local population around Albury was dense and well resourced, but not providing a great deal of information beyond that (Andrews, 1912). The authors also note that the available ethnographic information may not be accurate. In addition, where this report refers to 'Aboriginal culture', it is acknowledged that there are many nations/clan groups that make up First Nation's peoples.

The area covered by the Wiradjuri encompasses a large portion of southern and central NSW, including the area surrounding much of the Murrumbidgee and Lachlan rivers, and north to Dubbo. The majority of the groups contained between 10 and 50 people, but could contain up to 100, with families sleeping in lean-tos known as gunyahs, which could take a variety of forms. The original inhabitants of the area are identified by Tindale (1974) as the Jeithi people, whose area lay on the north side of the Murray from west of Tocumwal to near Howlong. Tindale states that the group once extended further east, but were displaced by the Wiradjuri during the early days of settlement. Kelly and Price (2004) state that the majority of the current Aboriginal community accept the Wiradjuri people as the traditional owners in the area.

Research conducted to the north of the study area near Wagga Wagga suggests that after the arrival of Europeans in the area, many of the local groups in the area maintained a pragmatic relationship with the local landholders and station owners, with one station owner reporting that at any one time, he had up to 20 Aboriginal people employed on his property (Montgomery, 2011). Early European settlers were said to adopt Indigenous bushcraft in order to secure their own survival. One of the first settlers in the Albury area, William Wyse, set up his camp close to the Aboriginal camp at Mungabareena for such purposes (Spennemann, 2015). Trading was established between Europeans and Aboriginal people, with the Indigenous people often providing their boating skills and knowledge of the local watercourses. Bark canoes were noted as being made on demand. The first formal punt across the Murray was run by an Aboriginal man by the name of Merriman.

In 1844 it was noted that around 100 Aboriginal people were present in Albury. George Augustus Robinson counted 50 huts and 250 individuals when he passed through Albury in September 1844. The population of Aboriginal people quickly declined in the following ten years. By 1854 the decline in population was so obvious that it was remarked by Reverend Henry Elliott that 'from Albury and its immediate neighbourhood, too, the blacks have for a considerable time past almost entirely disappeared' (Spennemann, 2015). Many people had moved to Lake Urana with only a few campsites present on the floodplain towards Wodonga. Around 1865, it is noted that there was a sudden drop in the Aboriginal population surrounding Wagga Wagga as evidenced by decreasing numbers of people attending blanket distributions. A similar trend is noted in the Albury area, with Upcher and Smith (1992) noting that Aboriginal people living in the Albury area continued living a traditional life into the 1860s, albeit in decreasing numbers. By 1882 only a single Aboriginal person was recorded as a resident in Albury (Spennemann, 2015).

3.2 Aboriginal heritage located in the study area

The archaeological assessment of the study area identified one Aboriginal site within the study area. This Aboriginal site, a modified tree (AHIMS 55-6-0064 mungabareena-mm-1) was unable to be relocated within or immediately adjacent the southern extent of the study area during a field survey. An Aboriginal Site Impact Recording Form was submitted to the AHIMS Registrar on 26 June 2019. AHIMS 55-6-0064 mungabarina-mm-

1 was subsequently listed as destroyed. A later additional ground survey undertaken at the request of DPIE (formerly OEH) to confirm the location or destruction of AHIMS 55-6-0064 identified a scarred tree within the study area some distance west of the coordinate projections provided by AHIMS. This tree is assumed to be AHIMS site 55-6-0064 mungabareena-mm1, whose location was likely miss-recorded. A further update was submitted to AHIMS and at the time of writing was awaiting approval.

A previous assessment by Edwards and Morris (2017) identified one intangible cultural heritage place, however this site was not registered on AHIMS due to a lack of information regarding its use as a ceremonial site. A brief description from the previous report is provided below.

Rockwood Quarry Intangible Aboriginal cultural heritage

During the field survey, the RAPs indicated that the granite boulders in the north-eastern corner of the study area may be an important ceremonial area. Yalmambirra also provided the following oral history information:

A very important Wiradjuri elder, who has now passed so I cannot say his name, told me that all the areas on high hills in this part of Wiradjuri country were important meeting and gathering places or ceremonial places for men or women.

The area is circular in shape and comprises approximately 6,800 square metres of ground on the top of hill in the study area. The area contains some eucalypts and granite outcrops, boulders and tors. The ground is covered by grasses. The area provides views of the surround landscape.

As this area is not associated with any tangible Aboriginal cultural heritage site/object or PAD, it cannot be recorded in AHIMS. In addition, the site does not meet the criteria to be declared as an Aboriginal place under section 84 of the NPW Act. Only Aboriginal objects and Aboriginal places are protected under the *National Parks and Wildlife Act 1974*. As such an AHIP is not required for this site (Edwards & Morris, 2017).

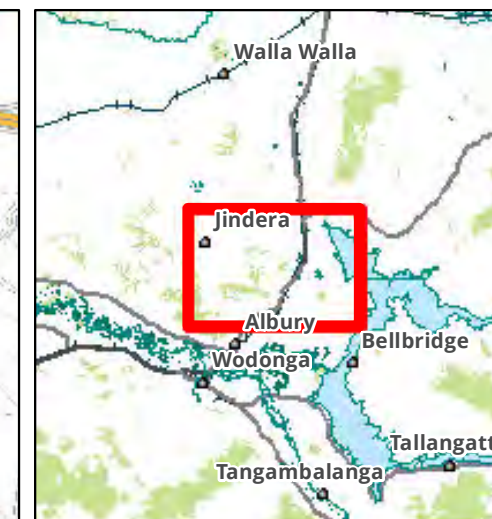
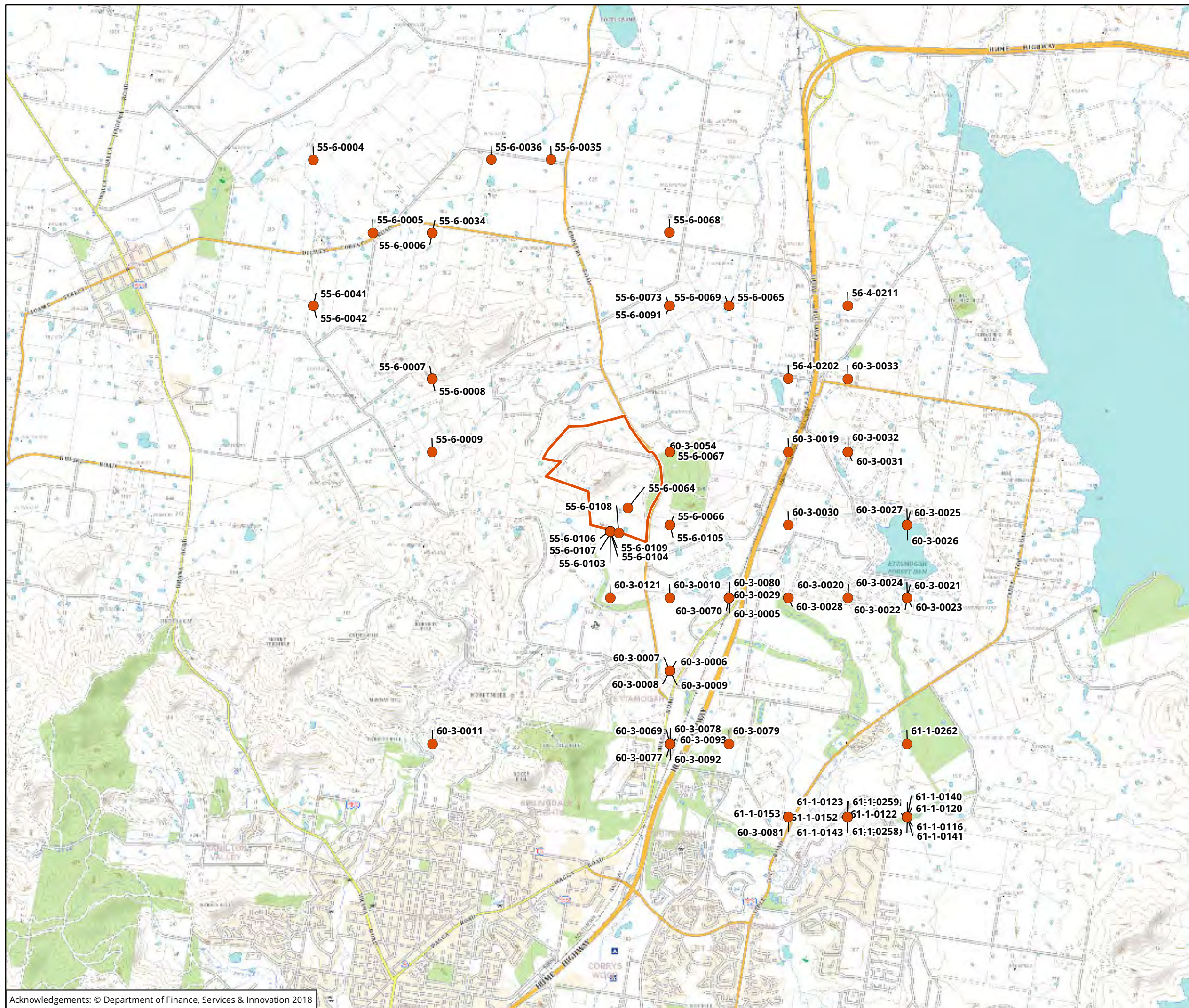
3.3 Interpretation of past Aboriginal land use

While there is limited physical evidence of Aboriginal land use in the study area, the natural features (high hills) of the study area would have been closely linked with Aboriginal land use of the surrounding area and provides a view towards Gerogery, Table Top and Ettamogah below including a number of Aboriginal sites such as artefact scatters and scarred trees recorded on the plain and along and adjacent to Eight Mile Creek. RAPs have indicated that granite boulders in the north-eastern section of the study area may hold significance as ceremonial ground. This circular area comprises approximately 6,800 metres of ground on top of a hill.

Waterways within the geographic region would have presented favourable conditions for seasonal campsites. Stream order dictates that as stream order increases, so does the likelihood of permanent sources of water. Predictive models favour higher order streams as likely locations for campsites as they provide more stable sources of water. A non-perennial (seasonal) first order stream drains north from the centre of the study area and adjoins with a number of first and second order streams. A number of small, unnamed lower order streams flow between 500 and 700 metres to both the east and west of the study area and the non-perennial third order stream, Eight Mile Creek, flows through a valley approximately 750 metres south-west.

A number of landscape resources would have been available within the geographic region for use by Aboriginal inhabitants. These resources include native plant species which were utilised as food sources and materials for the manufacture of shelter or tools. Mammals, such as kangaroo, wallaby, emu and possum were also hunted for food. Possums were highly prized for their fur and animal products were also utilised for tool making and ceremonial items.

The study area overlies the Silurian I-type granite formation, of which quartz is a common mineral. The presence of quartz would have provided materials for the manufacture of stone tools, which may be present *in situ* within deeper alluvial sediments.

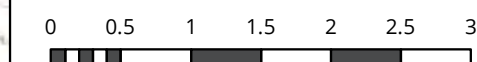


Legend

-  Study area
-  AHIMS Record

Figure 4 AHIMS records near the study area

NOT TO BE MADE PUBLIC



Kilometers
Scale: 1:54,000 @ A3
Coordinate System: GDA 1994 NSW Lambert



Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

Matter: 27381
Date: 12 March 2020,
Checked by: jturner, Generated by: jturner
Location: P:\27300s\27381\Mapping\27381_F3_AHIMS.mxd

4 Aboriginal community consultation

Consultation with the Aboriginal community has been undertaken in compliance with the consultation requirements as detailed below. A consultation log of all communications with RAPs is provided in Appendix 1.

4.1 Stage 1: Notification of project proposal and registration of interest

4.1.1 Identification of relevant Aboriginal stakeholders

In accordance with the consultation guidelines, Biosis Pty Ltd notified the following bodies regarding the Proposal:

- Albury City Council
- NSW Office of Environment and Heritage (OEH)
- NSW Native Title Services Corporation Limited (NTSCORP Limited)
- Office of the Registrar, Aboriginal Land Rights Act 1983 of Aboriginal Owners
- National Native Title Tribunal (NNTT)
- Albury and District Local Aboriginal Land Council (ALALC).

A list of known Aboriginal stakeholders in the Albury was provided by OEH (a copy of these responses are provided in Appendix 2 and include:

- Albury and District Local Aboriginal Land Council (ALALC)
- Yalmambirra
- Mungabareena Aboriginal Corporation
- Wiradjuri Council of Elders
- Denise McGrath
- Leonie McIntosh
- Nancy Rooke
- Dan Clegg

A search conducted by the Office of the Registrar, Aboriginal Land Rights Act 1983 (NSW) listed no Aboriginal Owners with land within the study area. A search conducted by the NNTT listed no Registered Native Title Claims, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area.

4.1.2 Public notice

In accordance with the consultation guidelines, a public notification was placed in the following newspaper:

- The Border Mail (21 July 2018)

The advertisement invited Aboriginal people who hold cultural knowledge to register their interest in a process of community consultation to provide assistance in determining the significance of Aboriginal object(s) and/or places in the vicinity of the study area. A copy of the public notice is provided in Appendix 2.

4.1.3 Registration of Aboriginal parties

Aboriginal groups identified in Section 4.1.1 were sent a letter inviting them to register their interest in a process of community consultation to provide assistance in determining the significance of Aboriginal object(s) and/or places in the vicinity of the study area. In response to the letters and public notice, a total of 3 groups registered their interest in the project. Responses to registration from Aboriginal parties are provided in Appendix 3. A full list of Aboriginal parties who registered for consultation is provided below:

- Albury and District Local Aboriginal Land Council (ADLALC)
- Yalmambirra
- Raymond Kennedy

4.2 Stage 2: Presentation of information about the proposed project

On 14 August 2018, Biosis provided RAPs with details about the proposed development works (project information pack). A copy of the project information pack is provided in Appendix 3.

4.3 Stage 3: Gathering information about cultural significance

4.3.1 Archaeological assessment methodology information pack

On 14 August 2018, Biosis provided each RAP with a copy of the project methodology pack outlining the proposed Aboriginal cultural heritage assessment process and methodology for this project. RAPs were given 28 days to review and prepare feedback on the proposed methodology. A copy of the project methodology pack is provided in Appendix 4.

No comments from RAPs were received at this stage of consultation.

Methodology for the additional survey to locate AHIMS 55-6-0064 was discussed in person and included the careful examination of every mature tree, living, dead and fallen, within the southern portion of the study area.

No comments from RAPs regarding cultural significance were received at this stage of consultation.

4.3.2 Information gathered during fieldwork

No specific information regarding the study area was provided by RAPs during fieldwork whilst undertaking either the initial or additional archaeological survey.

4.4 Stage 4: Review of draft Aboriginal cultural heritage assessment report

Following completion of the DRAFT Aboriginal cultural heritage assessment report (ACHAR), it was provided to RAPs on 12 February 2019 for review and comment. RAPs were given 28 days to provide comments and one response was received as detailed below.

Further consultation was undertaken following recommendations received by the Director of Planning and Environment, Albury City, from OEH on 8 May 2019.

Onsite discussions were held with RAPs and a number of telephone conversations undertaken regarding the updating of this report, the recommendations and updating of the site card details for AHIMS 55-6-0064 mungabareena-mm1.

A record of consultation is provided in Comments on the draft report are provided in Appendix 5.

5 Aboriginal cultural significance assessment

The two main values addressed when assessing the significance of Aboriginal sites are cultural values to the Aboriginal community and archaeological (scientific) values. This report will assess the cultural values of Aboriginal sites in the study area. Details of the scientific significance assessment of Aboriginal sites in the study area are provided in Appendix 6.

5.1 Introduction to the assessment process

Heritage assessment criteria in NSW fall broadly within the significance values outlined in the Australia International Council on Monuments and Sites (ICOMOS) *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (Australia ICOMOS 2013) (the Burra Charter). This approach to heritage has been adopted by cultural heritage managers and government agencies as the set of guidelines for best practice heritage management in Australia. These values are provided as background and include:

- **Historical significance** (evolution and association) refers to historic values and encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, a historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives *in situ*, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.
- **Aesthetic significance** (Scenic/architectural qualities, creative accomplishment) refers to the sensory, scenic, architectural and creative aspects of the place. It is often closely linked with social values and may include consideration of form, scale, colour, texture, and material of the fabric or landscape, and the smell and sounds associated with the place and its use.
- **Social significance** (contemporary community esteem) refers to the spiritual, traditional, historical or contemporary associations and attachment that the place or area has for the present-day community. Places of social significance have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods or events. Communities can experience a sense of loss should a place of social significance be damaged or destroyed. These aspects of heritage significance can only be determined through consultative processes with local communities.
- **Scientific significance** (Archaeological, industrial, educational, research potential and scientific significance values) refers to the importance of a landscape, area, place or object because of its archaeological and/or other technical aspects. Assessment of scientific value is often based on the likely research potential of the area, place or object and will consider the importance of the data involved, its rarity, quality or representativeness, and the degree to which it may contribute further substantial information.

The cultural and archaeological significance of Aboriginal and historic sites and places is assessed on the basis of the significance values outlined above. As well as the Burra Charter significance values guidelines, various government agencies have developed formal criteria and guidelines that have application when assessing the significance of heritage places within NSW. Of primary interest are guidelines prepared by the Australian

Government, the NSW OEH and the Heritage Branch, and the NSW Department of Planning and Environment. The relevant sections of these guidelines are presented below.

These guidelines state that an area may contain evidence and associations which demonstrate one or any combination of the Burra Charter significance values outlined above in reference to Aboriginal heritage. Reference to each of the values should be made when evaluating archaeological and cultural significance for Aboriginal sites and places.

In addition to the previously outlined heritage values, the OEH *Guidelines to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011) also specify the importance of considering cultural landscapes when determining and assessing Aboriginal heritage values. The principle behind a cultural landscape is that 'the significance of individual features is derived from their inter-relatedness within the cultural landscape'. This means that sites or places cannot be 'assessed in isolation' but must be considered as parts of the wider cultural landscape. Hence the site or place will possibly have values derived from its association with other sites and places. By investigating the associations between sites, places, and (for example) natural resources in the cultural landscape the stories behind the features can be told. The context of the cultural landscape can unlock 'better understanding of the cultural meaning and importance' of sites and places.

Although other values may be considered – such as educational or tourism values – the two principal values that are likely to be addressed in consideration of Aboriginal sites and places are the cultural/social significance to Aboriginal people and their archaeological or scientific significance to archaeologists and the Aboriginal community. The determinations of archaeological and cultural significance for sites and places should then be expressed as statements of significance that preface a concise discussion of the contributing factors to Aboriginal cultural heritage significance.

5.2 Cultural (social significance) values

Cultural or social significance refers to the spiritual, traditional, historical and/or contemporary associations and values attached to a place or objects by Aboriginal people. Aboriginal cultural heritage is broadly valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (DECCWa 2010 p.iii). More specifically it provides:

- a 'connection and sense of belonging to Country' (DECCW 2010a p.iii)
- a link between the present and the past (DECCWa 2010 p.3)
- a learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCWa 2010 p.3)
- further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (DECCWa 2010 p.3).

It is acknowledged that Aboriginal people are the primary determiners of the cultural significance of Aboriginal cultural heritage. During consultation the following information was provided by RAPs in regards to the cultural values of the study area.

A meeting with the RAPs was held following the initial field survey to discuss the results of the background research and the survey. During this meeting RAPs indicated that a ridgeline present within the study area would have provided a vantage point for Aboriginal people travelling through the area.

No further information or specific oral history was provided during discussions following the additional survey in which what is presumed to be AHIMS 55-6-0064 mungabareena-mm1.

5.3 Historic values

Historic significance refers to associations a place or object may have with a historically important person, event, phase or activity to the Aboriginal and other communities. The study area is not known to have any historic associations.

5.4 Archaeological (scientific significance) values

The modified (scarred) tree most likely represents the opportunistic use of the landscape in close proximity to a water source but any further observations are restricted due to the clearing of the area. The isolated nature of the tree in remnant vegetation and the fact that the adjacent landscape has been cleared means that as a representative example of this site type has high value. The tree is alive and healthy which enhances the viability of its medium term survival, therefore its integrity is also high.

Overall, however, the research potential of the site identified during this assessment is considered to be low. While the presence of the site can be used to assist in the development of site modelling for the local landscape, its scientific value for further research is limited

5.5 Aesthetic values

The landscape of the study area is relatively undisturbed and is an example of a high vantage point within the surrounding landscape. The study area is closely linked with Aboriginal cultural values of the surrounding area and provides a view towards Gerogery, Table Top and Ettamogah below (including a number of Aboriginal sites recently recorded along and adjacent to Eight Mile Creek). This context gives the study area a strong sense of place. The local Aboriginal community strongly identifies with the landscape of the study area.

5.6 Social significance

While the true cultural and social value of Aboriginal sites can only be determined by local Aboriginal peoples, as a general concept, all sites hold cultural value to the local Aboriginal community. An opportunity to identify cultural and social value was provided to the Aboriginal representatives for this proposal through the fieldwork and draft reporting process.

Feedback provided by Yalmambirra during on site and phone conversations about the cultural value of the modified tree site mungabareena-mm1 (AHIMS 55-6-0064) indicated that ALL Aboriginal sites hold cultural value to the Aboriginal community. As such it was made clear that the site is important and a particular site type that should be avoided by development.

5.7 Other values

There are no other known heritage values associated with the study area. The area may have some educational value (not related to archaeological research) through educational material provided to the public about the Aboriginal occupation and use of the area, although the modified tree is within private property and there is little for the public to see.

5.8 Statement of significance

This study area does not have any direct historical associations and has an overall low scientific potential.

The significance of sites was assessed in accordance with the following criteria:

- requirements of the code
- the Burra Charter
- *Guide to Investigating and Reporting on Aboriginal Heritage.*

The combined use of these guidelines is widely considered to represent the best practice for assessments of Aboriginal cultural heritage. The identification and assessment of cultural heritage values includes the four values of the Burra Charter: social, historical, scientific and aesthetic. The resultant statement of significance has been constructed for the study area based on the significance ranking criteria assessed in Table 4.

5.8.1 Statement of significance for 55-6-0064

The isolated nature of the scarred tree Mungabareena-mm1 (AHIMS 55-6-0064) in remnant vegetation and the fact that the adjacent landscape has been cleared means that as a representative example of this site type has high value. The tree is alive and healthy which enhances the viability of its medium term survival, therefore its integrity is also high.

The Aboriginal community has indicated during consultation that the general Ettamogah area has significance to the community, particularly to those who trace their ancestry to the Albury region. AHIMS 55-6-0064 does not however, have any direct historical or aesthetic associations and has a low scientific potential.

Table 4 Significance assessment criteria

Site name	Criteria	Ranking
Mungabareena m-mm1 AHIMS (55-6-0064)	Cultural – discussions with the local Aboriginal communities reflect that the site is high in value.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site possesses some archaeological values.	Low
	Aesthetic – the site is rural landscape that while subject to clearing for pastoral purposes retains some of its original form.	Low to Moderate

6 Development limitations and mitigation measures

There is one recorded Aboriginal sites/object that may be subject to harm. AHIMS site 55-6-0064 could not be relocated during the field survey and following consultation with the RAPs, a site impact form was submitted stating the site has likely been destroyed. An additional survey identified a tree which Raps felt exhibited cultural modification (scarring). They further believed that this site was mungabareena-mm1 (AHIMS 55-6-0064) which had been thought previously to have been destroyed. No harm to the site is anticipated as it is located outside the area of proposed impact (see Figures 3 and 4), however, following consultation with the RAPs it was determined that measures to mitigate any potential harm must be recommended.

6.1 Potential risks to Aboriginal cultural heritage

As previously outlined, the Project involves a continuation of an existing extractive industry (Rockwood Quarry), which is currently operating on the subject land. The proposed development involves a continuation of an existing extractive industry (Rockwood Quarry), which is currently operating on the subject land, as well as the use of this land to dispose of up to 10,000 tonnes of bio solid waste and the crushing of recycled concrete. More specifically, the proponent seeks approval for the continuation of existing extractive industry operations on-site for a period of 30 years, as well as an increase in the annual production of crushed rock from 75,000 cubic metres to 100,000 cubic metres per annum. The quarrying operations onsite are and will continue to be limited to the existing Pit 1 area and an area of 450 metres x 300 metres generally located within the middle of the site surrounding Pit 3. The proposal also includes road embankment works alongside Gerogery Road and the use of an unsealed Crown travelling Stock Reserve to access Pit 1.

The project includes the significant disturbance of ground of topsoil and the removal of bedrock by blasting and heavy machinery. There is one tangible Aboriginal site within the study area, mungabareena-mm1 (AHIMS 55-6-0064). At the time of writing, works were not planned to be undertaken within the immediate vicinity of mungabareena-mm1 (AHIMS 55-6-0064). Avoiding harm to the Aboriginal site is technically possible through avoidance.

Providing Recommendation 1, as outlined in Section 7 of this report, is implemented, the potential risk or harming Aboriginal cultural heritage is low.

7 Recommendations

The recommendations below respond specifically to the wishes of the RAPs. Recommendations regarding the archaeological value of the site, and the subsequent management of Aboriginal cultural heritage is provided in the archaeological report (Appendix 6).

Recommendation 1: Protection of mungabareena-mm1 (AHIMS 55-6-0064)

Works *must* avoid the Aboriginal site identified as mungabareena-mm1 (AHIMS 55-6-0064) as per the current design plans detailed in this report. A *minimum* 10 metre buffer around the tree should be in place to protect the tree root zone. This buffer should be clearly defined through the installation of fencing around the tree.

Recommendation 2: No further assessment is required

No further archaeological investigation or works are required to be undertaken for the study area. Should the proposed works extend beyond the current design plans, further archaeological assessment will be required. This would include consultation with RAPs and may include further archaeological survey.

In the event that unexpected find, including human remains, are unearthed during any phase of the project please refer to Recommendations 2 and 3 below.

Recommendation 3: Stop work provision for any potential heritage sites identified during the project

All Aboriginal places and objects are protected under the NPW Act. This protection extends to Aboriginal objects and places that have not been identified but might be unearthed during construction.

If construction proceeds without an approved AHIP, work must cease if Aboriginal objects or places are identified. If an Aboriginal object is discovered and/or harmed in, or under the land, while undertaking development activities, the proponent must:

- Immediately cease work at the location
- Secure the area to ensure no further harm to the Aboriginal object
- Notify OEH as soon as practical on 131555, providing details of the Aboriginal object and its location
- Not recommence works without authorised in writing by OEH

Historical archaeological sites are protected under the relics provisions (s139 – 146) of the NSW *Heritage Act 1977*. Should any historical archaeological sites be identified during any phase of the proposed development, all works must cease in the vicinity of the find and the project archaeologist and A. P. Delaney & Co. Pty Ltd notified. Should the archaeological nature of the find be confirmed the Heritage Branch of the NSW Department of Planning, will require notification.

These steps are outlined in Figure 5.

Recommendation 4: Stop work provision for any potential discovery of human remains

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the activity area must follow these steps:

3. **Discovery**: If suspected human remains are discovered all activity in the vicinity must stop IMMEDIATELY to ensure minimal damage is caused to the remains; and the remains must be left in place, the area secured to prevent unauthorised access and the remains protected from harm or damage.
4. **Notification**: Once suspected human skeletal remains have been found, the NSW Police and Coroner's Office must be notified immediately. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and OEH NSW. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW will be notified of the find under s.146 of the *Heritage Act 1977*.

These steps are outlined in Figure 5.

Recommendation 5: Continued consultation with the registered Aboriginal stakeholders

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010), it is recommended that the proponent provides a copy of this draft report to the Aboriginal stakeholders and considers all comments received. The proponent should continue to inform these groups about the management of Aboriginal cultural heritage within the Study Area throughout the life of the project.

Possible Aboriginal object, heritage item, or burial encountered

STOP WORK

Contact archaeologist or heritage consultant to assess find

If Aboriginal object found notify OEH. If Heritage relic found notify NSW Heritage Council. If human remains found notify NSW Police and OEH

Yes

Is an Impact likely to occur?

No

Consult with relevant authority

Obtain relevant approvals, license or Permits as required

Recommence work once relevant advice is sought and approvals, licenses and permits are obtained

**Recommence work
with caution**

Include new items in subsequent inductions

References

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Appendices

Appendix 1 Consultation log

Stage 1 – Notification of project proposal and registration of interest

Step 1- Identification of Aboriginal people/parties with an interest in the proposed study area.

Organisation contacted	Date and type of contact	Date and type of response	Response details
OEH Albury Office	04/07/2018 Email Letter	09/07/2018 Email Letter	List of known Aboriginal parties for Albury local government area.
Native Title Services CORP Limited	03/07/2018 Email Letter	05/07/2018 Email	No relevant entries
Office of the Registrar, Department of Aboriginal Affairs	03/07/2018 Email Letter	11/07/2018 Letter via Email	No Registered Aboriginal Owners Pursuant to Division 3 of the <i>Aboriginal Land Rights Act 1983</i> .
Albury and District Local Land Services	03/07/2018 Email Letter	No Response	n/a
Albury City Council	03/07/2018 Email Letter	18/07/2018 Email	Registered Interest
Murray Local Land Service	03/07/2018 Email Aboriginal Communities Liaison	No Response	n/a

Step 2- Public advertisement

The public notice was published in the Border Mail on the 21 July 2018. A copy of the advertisement is provided in Appendix 2.

Step 3- Registration of interest.

The registration period ran from the 21 July 2018 to 14 August 2018. Leeway was given to Aboriginal parties/groups who provided responses shortly after the close of this period and they have been registered as Aboriginal parties for consultation.

Organisation contacted	Date and type of contact	Date and type of response	Response details
Albury and District Local Land Services	25/07/2018 Email Letter	14/08/2018 Telephone	Expressed an interest as a RAP
Dan Clegg	25/07/2018 Email Letter	No Response	n/a
Denise McGrath	25/07/2018 Email	No Response	n/a
Leonie McIntosh	25/07/2018 Email Letter	No Response	n/a

Organisation contacted	Date and type of contact	Date and type of response	Response details
Mungabareena Aboriginal Corporation	25/07/2018 Post	No Response	n/a
Wiradjuri Council of Elders	25/07/2018 Post	No Response	n/a
Nancy Rooke	25/07/2018 Post	No Response	n/a
Yalmambirra	30/07/2018 Email Letter and Post	17/8/2018 Telephone	Expressed an interest as a RAP
Raymond Kennedy	25/07/2018 Email	28/07/2018 Email	Expressed an interest as a RAP

Stage 2 – Presentation of information about the proposed project

Step 1- Provision of project information pack

A copy of the information pack is provided in Appendix 3 and a copy of the covering email is provided following.

Organisation contacted	Date and type of contact	Date and type of response	Response details
Yalmambirra	14/08/2018 Post	17/08/2018 Telephone	Acknowledge receipt
Raymond Kennedy	14/08/2018 Email	28/07/2018 Email	Acknowledged receipt
ALALC	14/08/2018 Email	15/08/2018 Email	Out of Office Reply

Stage 3 – Gathering information about cultural significance

Step 1- Provision of project methodology pack and consultation meeting

A copy of the methodology pack is provided in Appendix 4 and a copy of the covering email is provided following.

Organisation contacted	Date and type of contact	Date and type of response	Response details
OEH	14/08/2018 Email	No Response	n/a
Yalmambirra	14/08/2018 Post	17/08/2018 Telephone	Agreed to methodology
Raymond Kennedy	14/08/2018 Email	No Response	n/a
ALALC	14/08/2018 Email	17/08/2018 Telephone	Agreed to methodology

Step 2- Field survey

Organisation contacted	Date and type of contact	Date and type of response	Response details
Yalmambirra	13/09/2018 Email 12/02/2020 Telephone	17/09/2018 Telephone 23/02/2020 In person	Accepted invitation to participate in the survey. Participated in survey on 18-20/09/2018 Accepted invitation to participate in additional survey. Participated in additional field survey 26/02/2020.
Raymond Kennedy	13/09/2018 Email	14/09/2018 Email	Accepted invitation to participate in the survey. Participated in survey on 18-20/09/2018
ALALC	13/09/2018 Email 12/02/2020 Telephone	17/09/2018 Telephone No Response	Accepted invitation to participate in the survey. Participated in survey on 18-20/09/2019 Invitation extended to participate in additional field survey.
Rob Clegg	25/06/2020 in person	25/06 2020 in person	Invited by Yalmambirra and Meaghan Aitchison to assist in additional field survey on 26/02/2020. Agreed to assist.
Stephen Clegg	25/06 2020 in person	25/06 2020 in person	Invited by Yalmambirra and Meaghan Aitchison to assist in additional field survey on 26/02/2020. Agreed to assist.
Peter Clegg	25/06 2020 in person	25/06 2020 in person	Invited by Yalmambirra and Meaghan Aitchison to assist in additional field survey on 26/02/2020. Agreed to assist.

Stage 4 – Review of draft report

A draft of the report was forwarded to those who registered interest and participated in fieldwork. Further comment was sought following comments received from OEH on 8 May 2019 and again on 19 November 2019.

Step 1- Provision of draft report for review

Organisation contacted	Date and type of contact	Date and type of response	Response details
Yalmambirra	13/02/2019 Draft report by email	19/03/2019 Email	Happy with assessment and consultation process.
	24/06/2019 Email and Telephone Conversation re- Aboriginal cultural heritage within	19/08/2019 Telephone	Confirmed that no culturally modified tree was identified <i>within</i> the study area. Suggested monitor be appointed should works be undertaken immediately adjacent southern

Organisation contacted	Date and type of contact	Date and type of response	Response details
	study area		boundary of study area.
	28/02/2020 in person	10/03/2020 Telephone	Discussion of conditions and updates to the Aboriginal site AHIMS 55-6-0064. Assumes that the tree identified during additional field survey is AHIMS 55-6-0064.
Raymond Kennedy	13/02/2019 Draft report by email	No Response	No Response
	24/06/2019 Email re-Aboriginal cultural heritage within study area		
ALALC	13/02/2019 Draft report by email	No Response	No Response
	24/06/2019 Email re-Aboriginal cultural heritage within study area		

Appendix 2 Stage 1: Notification of project proposal and registration of interest

3 July 2018

Peter Ewin
Senior Team Leader Planning, South West
Regional Operations Group (South Branch)
Office of Environment and Heritage
PO Box 544, Albury, NSW 2640
peter.ewin@environment.nsw.gov.au

Dear Sir/Madam

RE: Proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table Top, NSW

Our Ref: Matter 27381

A. P. Delaney & Co Pty Ltd (the proponent) is proposing to extend the existing 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, New South Wales (NSW). An Aboriginal Cultural Heritage Assessment (ACHA) was prepared for the project in 2017.

The NSW Office of Environment and Heritage (OEH) have directed the proponent (A. P. Delaney & Co Pty Ltd) to conduct another ACHA for the 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW (the study area) as a part of an Environmental Impact Statement (EIS). This ACHA will include areas not previously assessed by the initial ACHA. The study area for this ACHA includes Lot 1 DP1018401, Lot 2 DP101840, Lot 3 DP233061 and Lot 70033 DP1060806 in the Albury Local Government Area (LGA) (see attached).

An ACHA will be undertaken which may result in an application for an Aboriginal Heritage Impact Permit (AHIP).

Biosis Pty Ltd is assisting Habitat Planning, on behalf of A. P. Delaney & Co Pty Ltd, with consultation with the Aboriginal community and the ACHA. Consultation with the Aboriginal community for this proposal will follow the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010). The purpose of the Aboriginal community consultation will be to provide sufficient information for the assessment of Aboriginal cultural heritage values and to inform the ACHA. This will assist with the application for an AHIP (if required), and will assist OEH in consideration and determination of the AHIP application.

A. P. Delaney & Co Pty Ltd invites Aboriginal people who hold cultural knowledge relevant in determining the significance of Aboriginal object(s) in the vicinity of the Study Area to assist and inform the Aboriginal Cultural Heritage Assessment. I am writing to you to request the names and contact details of any Aboriginal people who may have an interest for the proposed project area and hold knowledge relevant to determining the cultural significance of Aboriginal objects and/or places.

Please send any relevant contact details to:

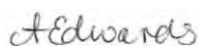
**Ashley Edwards
Biosis Pty Ltd
PO Box 3279 Albury NSW 2640
aedwards@biosis.com.au**

I request that you provide this information prior to 5.00PM, 17 July 2018.

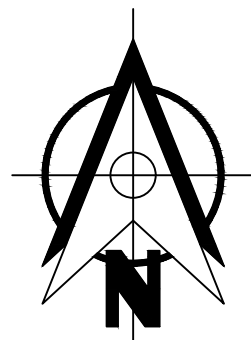
The proponents contact details are A. P. Delaney & Co Pty Ltd, PO Box 730, Albury NSW 2640. They can be contacted by phone on (02) 6021 2833.

If you have any queries regarding the Study Area please don't hesitate to contact me on the details below.

Yours sincerely

A handwritten signature in dark ink that reads 'A Edwards'.

Ashley Edwards
Senior Archaeologist
Mobile
0413 625 069
aedwards@biosis.com.au



HIMALAYA ESTATE

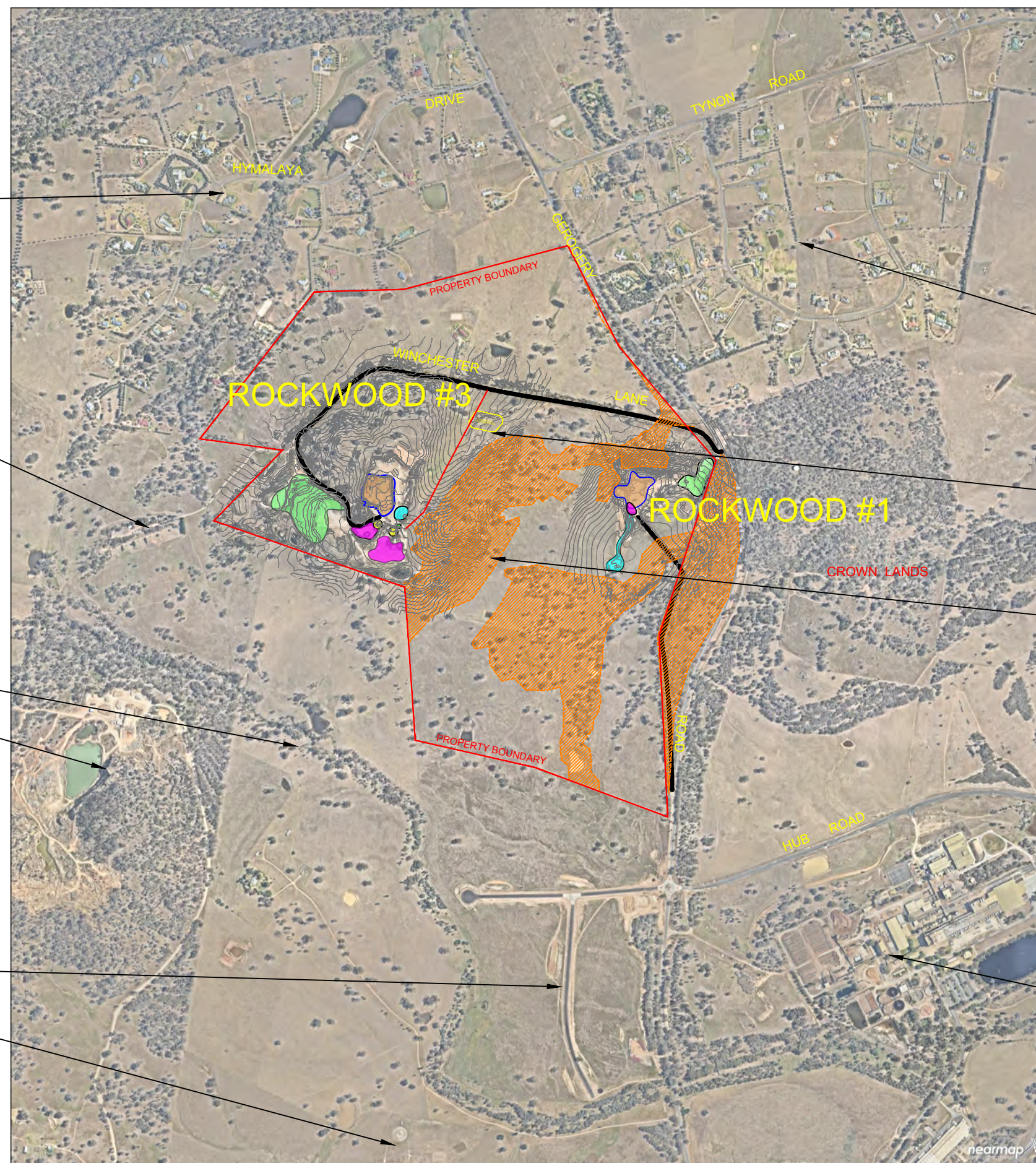
ALBURY WODONGA CLAY TARGET CLUB

EIGHT MILE CREEK

BURGESS QUARRY

NEXUS DEVELOPMENT

MODEL AERO CLUB



LEGEND

- ROCKWOOD PROPERTY BOUNDARY
- CURRENT EXTRACTION PITS
- E3 ZONE
- ROAD / TRACK

CLAREMONT ESTATE

ROCKWOOD 2 (CLOSED)

CROWN TRAVELLING STOCK RESERVE

ETTAMOGAH INTERMODAL HUB

NORSKE SKOG PAPER MILL



Ashley Edwards
Senior Archaeologist
Biosis Pty Ltd
PO Box 3279
ALBURY NSW 2640

Via email: aedwards@biosis.com.au

Dear Sir/Madam

**WRITTEN NOTIFICATION OF PROPOSAL AS REQUIRED UNDER DECCW ABORIGINAL
CULTURAL HERITAGE CONSULTATION REQUIREMENTS FOR PROPONENTS 2010
RE: Proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table
Top – Albury LGA**

I refer to your emailed letter received by the Office of Environment and Heritage (OEH) 4 July 2018 regarding the above matter.

Attached is a list of known Aboriginal parties for the Albury local government area that OEH feels is likely to have an interest in the development. Please note this list is not necessarily an exhaustive list of all interested Aboriginal parties. Receipt of this list does not remove the requirement of a proponent/ consultant to advertise in local print media and contact other bodies seeking interested Aboriginal parties, in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (April 2010).

Under Section 4.1.6. of the *Consultation Requirements* you must also provide a copy of the names of each Aboriginal person who registered an interest to the relevant OEH regional office and Local Aboriginal Land Council (LALC) within 28 days from the closing date for registering an interest.

Please note that the contact details in the list provided by OEH may be out of date as it relies on Aboriginal parties advising OEH when their details need changing. If individuals/companies undertaking consultation are aware that any groups contact details are out of date, or letters are returned unopened, please contact either the relevant stakeholder group (if you know their more current details) and/or OEH. AHIP applicants should make a note of any group they are unable to contact as part of their consultation record.

All the publicly available guidance material for ACH regulation has out-of-date details for contacting OEH offices. Updated map and contact details for OEH are in **Attachment B**. Please submit information using the relevant email address where possible.

Please contact me if you want to discuss this matter further.

Yours sincerely

MIRANDA KERR
A/ Senior Team Leader Planning
Regional Operations, South West
Office of Environment and Heritage

ATTACHMENT A – Registered Interests, Albury Local Government Area
ATTACHMENT B – Updated contact details for OEH Regional Operations Branches

ATTACHMENT A Registered Interests**Albury Local Government Area**

Organisation/ Individual Name	Address	Contact Details
Albury and District Local Aboriginal Land Council	PO Box 22 LAVINGTON NSW 2641 917 Chenery St GLENROY NSW 2640	Phone: 02 6025 7075 Fax: 02 6025 4340 Email: ceo@alburydistrictlalc.org
Yalmambirra	431 Dale Crescent LAVINGTON NSW 2641	Email: yalmambirra@outlook.com
Mungabareena Aboriginal Corporation	Michael Cutmore (CEO) 21 Hovell Street WODONGA VIC 3690	Phone: 02 6024 7599
Wiradjuri Council of Elders	Ngangaanha (Chair) 28 Hodges Street PARKES NSW 2870	Mobile: 0450 530 920
Denise McGrath	22 Yellow Gum Way THURGOONA NSW 2640	Mobile: 0431 553 302 Email: denise.mcgrath@hotmail.com
Leonie McIntosh	601 Kurnell Street NTH ALBURY NSW 2640	Email: leoniemcintosh1@outlook.com
Nancy Rooke	399 Wantigong Street NORTH ALBURY NSW 2640	Phone: 02 6040 1056
Dan Clegg	19 Hotham Circuit THURGOONA NSW 2640	Mobile: 0419 711 906 Email: way2deadly@gmail.com

**A. P. DELANEY & CO PTY LTD – ROCKWOOD QUARRY, TABLE TOP
NOTIFICATION AND REGISTRATION OF ABORIGINAL INTERESTS**

A. P. Delaney & Co Pty Ltd (the proponent) is proposing to extend the existing 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW.

The Study Area is located within Lot 1 DP1018401, Lot 2 DP101840, Lot 3 DP233061 and Lot 70033 DP1060806 in the Albury Local Government Area (LGA).

An Aboriginal Cultural Heritage Assessment will be undertaken for the proposed works as a part of an Environmental Impact Statement (EIS).

A. P. Delaney & Co Pty Ltd invites Aboriginal people who hold cultural knowledge in determining the significance of Aboriginal object(s) and/or places in the vicinity of the above area to register their interest in a process of community consultation.

The purpose of the community consultation will be to provide sufficient information for the assessment of Aboriginal cultural heritage values, to assist and inform the Aboriginal Cultural Heritage Assessment and to assist the proponent in the preparation of an application for an Aboriginal Heritage Impact Permit (AHIP), if required.

To register in writing please contact:

Ashley Edwards
Biosis Pty Ltd
PO Box 3279 Albury NSW 2640
aedwards@biosis.com.au

The proponents contact details are A. P. Delaney & Co Pty Ltd, PO Box 730, Albury NSW 2640. They can be contacted by phone on (02) 6021 2833.

**REGISTRATIONS MUST BE RECEIVED
BEFORE 5.00pm, Monday 13th August 2018**

25 July 2018

Sam Kirby CEO
Albury & District Local Aboriginal Land Council
PO Box 22
Lavington NSW 2640
LALC-albury@outlook.com

Dear Sam,

RE: Proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table Top, NSW
Our Ref: Matter 27381

A. P. Delaney & Co Pty Ltd (the proponent) is proposing to extend the existing 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, New South Wales (NSW). An Aboriginal Cultural Heritage Assessment (ACHA) was prepared for the project in 2017.

The NSW Office of Environment and Heritage (OEH) have directed the proponent (A. P. Delaney & Co Pty Ltd) to conduct another ACHA for the 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW (the study area) as a part of an Environmental Impact Statement (EIS). This ACHA will include areas not previously assessed by the initial ACHA. The study area for this ACHA includes Lot 1 DP1018401, Lot 2 DP101840, Lot 3 DP233061 and Lot 70033 DP1060806 in the Albury Local Government Area (LGA) (see attached).

An Aboriginal Cultural Heritage Assessment will be undertaken which may result in an application for an Aboriginal Heritage Impact Permit (AHIP).

Biosis Pty Ltd is assisting Habitat Planning, on behalf of A. P. Delaney & Co Pty Ltd, with consultation with the Aboriginal community and the Aboriginal Cultural Heritage Assessment. Consultation with the Aboriginal community for this proposal will follow the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010). The purpose of the Aboriginal community consultation will be to provide sufficient information for the assessment of Aboriginal cultural heritage values and to inform the Aboriginal Cultural Heritage Assessment. This will assist with the application for an AHIP (if required), and will assist OEH in consideration and determination of the AHIP application.

A. P. Delaney & Co Pty Ltd invites Aboriginal people who may have an interest for the proposed Study Area, and hold knowledge relevant to determining the cultural significance of Aboriginal objects and/or places, to register their interest in a process of community consultation.

To register, please contact:

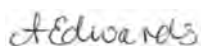
**Ashley Edwards
Biosis Pty Ltd
PO Box 3279 Albury NSW 2640
aedwards@biosis.com.au**

Registrations must be received prior to 5.00PM, Monday 13 August 2018.

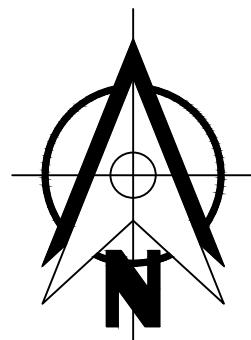
The proponents contact details are A. P. Delaney & Co Pty Ltd, PO Box 730, Albury NSW 2640. They can be contacted by phone on (02) 6021 2833.

If you have any queries regarding the Study Area please don't hesitate to contact me on the details below.

Yours sincerely

A handwritten signature in dark ink that reads 'A Edwards'.

Ashley Edwards
Senior Archaeologist
Mobile
0413 625 069
aedwards@biosis.com.au



HIMALAYA ESTATE

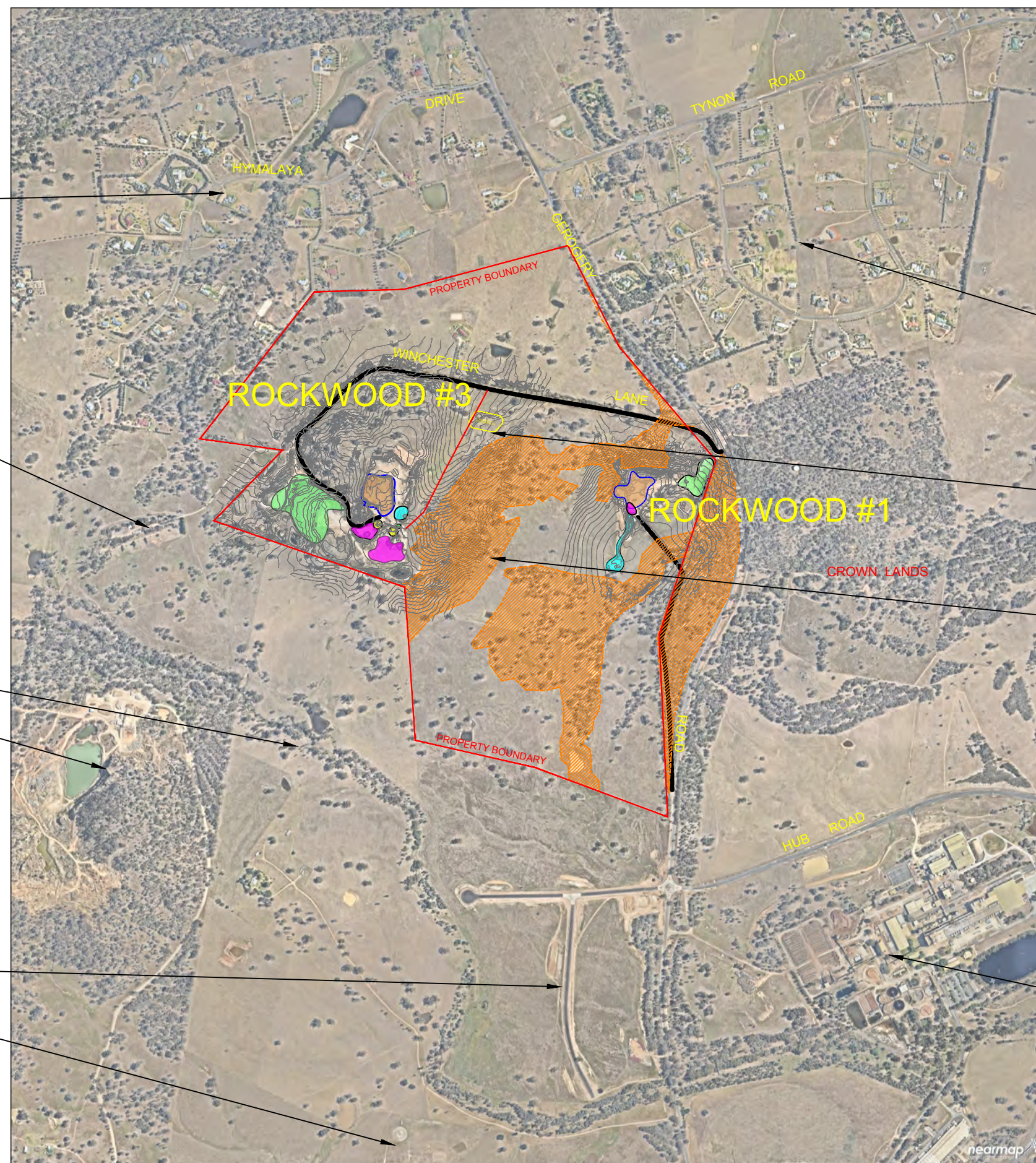
ALBURY WODONGA CLAY TARGET CLUB

EIGHT MILE CREEK

BURGESS QUARRY

NEXUS DEVELOPMENT

MODEL AERO CLUB



LEGEND

- ROCKWOOD PROPERTY BOUNDARY
- CURRENT EXTRACTION PITS
- E3 ZONE
- ROAD / TRACK

CLAREMONT ESTATE

ROCKWOOD 2 (CLOSED)

CROWN TRAVELLING STOCK RESERVE

ETTAMOGAH INTERMODAL HUB

NORSKE SKOG PAPER MILL

25 July 2018

Ngangaanha (Chair)
Wiradjuri Council of Elders
28 Hodges Street
Parkes NSW 2870

Dear Ngangaanha (Chair),

RE: Proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table Top, NSW

Our Ref: Matter 27381

A. P. Delaney & Co Pty Ltd (the proponent) is proposing to extend the existing 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, New South Wales (NSW). An Aboriginal Cultural Heritage Assessment (ACHA) was prepared for the project in 2017.

The NSW Office of Environment and Heritage (OEH) have directed the proponent (A. P. Delaney & Co Pty Ltd) to conduct another ACHA for the 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW (the study area) as a part of an Environmental Impact Statement (EIS). This ACHA will include areas not previously assessed by the initial ACHA. The study area for this ACHA includes Lot 1 DP1018401, Lot 2 DP101840, Lot 3 DP233061 and Lot 70033 DP1060806 in the Albury Local Government Area (LGA) (see attached).

An Aboriginal Cultural Heritage Assessment will be undertaken which may result in an application for an Aboriginal Heritage Impact Permit (AHIP).

Biosis Pty Ltd is assisting Habitat Planning, on behalf of A. P. Delaney & Co Pty Ltd, with consultation with the Aboriginal community and the Aboriginal Cultural Heritage Assessment. Consultation with the Aboriginal community for this proposal will follow the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010). The purpose of the Aboriginal community consultation will be to provide sufficient information for the assessment of Aboriginal cultural heritage values and to inform the Aboriginal Cultural Heritage Assessment. This will assist with the application for an AHIP (if required), and will assist OEH in consideration and determination of the AHIP application.

A. P. Delaney & Co Pty Ltd invites Aboriginal people who may have an interest for the proposed Study Area, and hold knowledge relevant to determining the cultural significance of Aboriginal objects and/or places, to register their interest in a process of community consultation.

To register, please contact:

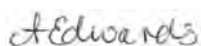
**Ashley Edwards
Biosis Pty Ltd
PO Box 3279 Albury NSW 2640
aedwards@biosis.com.au**

Registrations must be received prior to 5.00PM, Monday 13 August 2018.

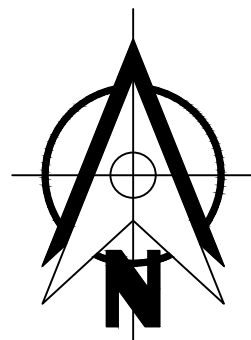
The proponents contact details are A. P. Delaney & Co Pty Ltd, PO Box 730, Albury NSW 2640. They can be contacted by phone on (02) 6021 2833.

If you have any queries regarding the Study Area please don't hesitate to contact me on the details below.

Yours sincerely

A handwritten signature in dark ink that reads 'A Edwards'.

Ashley Edwards
Senior Archaeologist
Mobile
0413 625 069
aedwards@biosis.com.au



HIMALAYA ESTATE

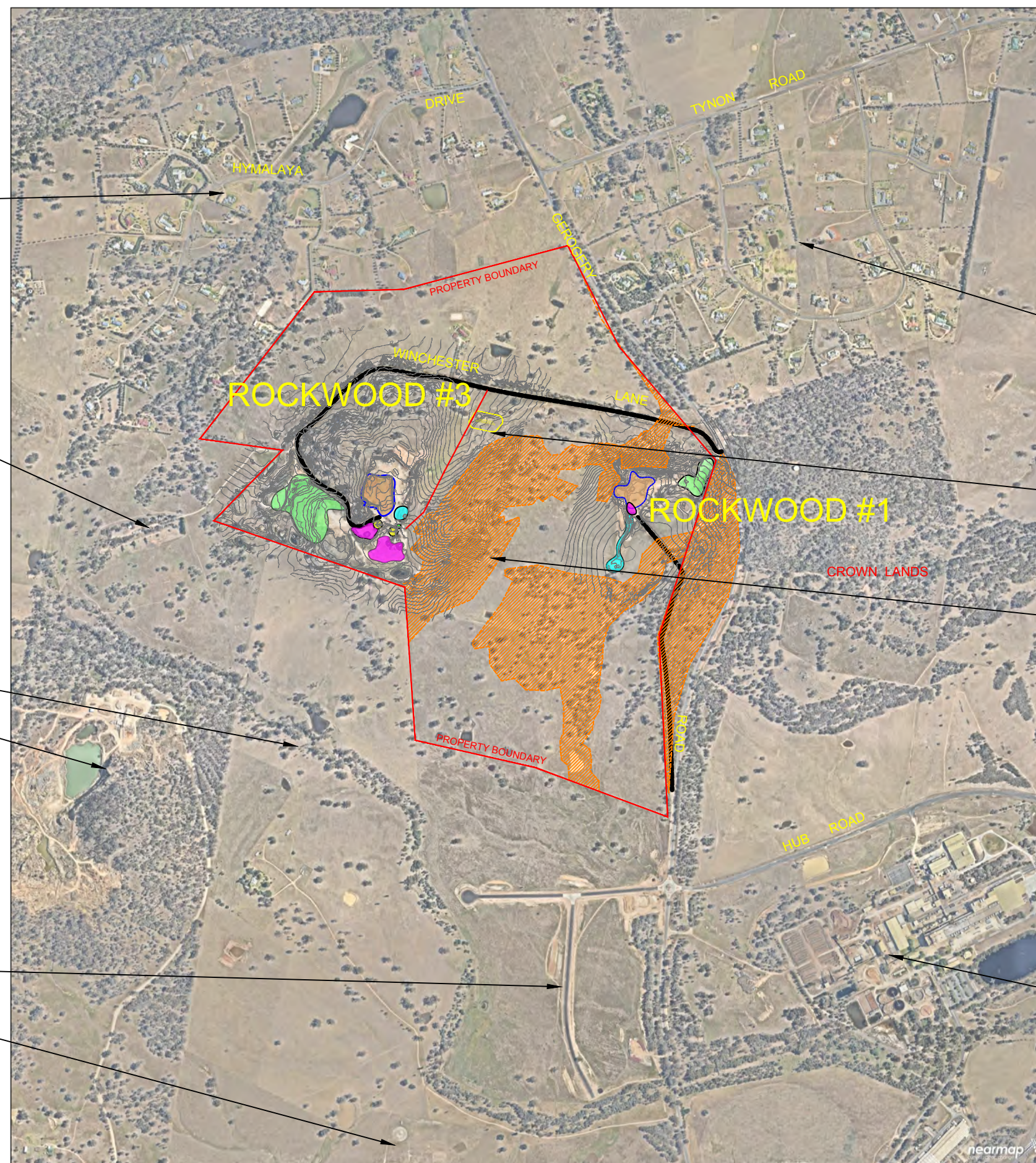
ALBURY WODONGA CLAY TARGET CLUB

EIGHT MILE CREEK

BURGESS QUARRY

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MODEL AERO CLUB



LEGEND

- ROCKWOOD PROPERTY BOUNDARY
- CURRENT EXTRACTION PITS
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CLAREMONT ESTATE

ROCKWOOD 2 (CLOSED)

CROWN TRAVELLING STOCK RESERVE

ETTAMOGAH INTERMODAL HUB

NORSKE SKOG PAPER MILL

Appendix 3 Stage 2: Presentation of information about the proposed project

14 August 2018

Sam Kirby
Albury and District Local Aboriginal Land Council
PO Box 22
Lavington NSW 2641
LALC-ALBURY@outlook.com

Dear Sam,

RE: Proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table Top, NSW

Our Ref: Matter 27381

Thank you for your registration of interest in this project. We are writing to you in order to provide you with the project information and methodology packs for the proposed extension of the existing 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, New South Wales (NSW). This information has been provided in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010a) (consultation requirements). In this letter you will find the project information pack, and attached to this mail out is the following document:

- Proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table Top, NSW – Project methodology

The purpose of the methodology document is to provide you with further information on the background of this assessment, as well as the methodology for how it will be conducted, including the test excavations (if required).

Please note that comments on the project methodology pack should be received before **5pm Wednesday 12 September 2018**.

As this project will involve survey and test excavations, the purpose of the second letter is to invite your feedback on the proposed project information and methodology packs, and to assist the proponent in the programming of groups for participation in the survey and test excavations (if required) which will be carried out within the study area.

If you have any queries regarding the project or the information in this letter, please don't hesitate to contact us.

Yours sincerely



William Truscott
Archaeologist
Mobile
0429 197 686
wtruscott@biosis.com.au

Biosis Pty Ltd
Albury Resource Group

Project information

The following information has been provided in accordance with the consultation requirements. The aim of this document is to provide registered Aboriginal parties with information about the proposed project and the scope of the Aboriginal archaeology and cultural heritage investigations and assessment.

Study area

The proposed study area is located at 208 Winchester Lane, Table Top, NSW (the study area) (Figure 1). The study area is located within includes Lot 1 DP1018401, Lot 2 DP101840, Lot 3 DP233061 and Lot 70033 DP1060806 in the Albury Local Government Area (LGA) (see attached).

Project

A. P. Delaney & Co Pty Ltd (the proponent) proposes to extend the 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW. The proposed development involves a continuation of an existing extractive industry (Rockwood Quarry), which is currently operating on the subject land, as well as the use of this land to dispose of up to 10,000 tonnes of biosolid waste and the crushing of recycled concrete. More specifically, the proponent seeks approval for the continuation of existing extractive industry operations on-site for a period of 30 years, as well as an increase in the annual production of crushed rock from 75,000 cubic metres to 100,000 cubic metres per annum. The quarrying operations onsite are and will continue to be limited to the existing Pit 1 area and an area of 450 metres x 300 metres generally located within the middle of the site surrounding Pit 3. The proposal also includes road embankment works alongside Gerogery Road and the use of an unsealed Crown travelling Stock Reserve to access Pit 1.

Biosis Pty Ltd is assisting Habitat Planning on behalf of the proponent, A. P. Delaney & Co Pty Ltd with consultation with the Aboriginal community and the Aboriginal Cultural Heritage Assessment. Consultation with the Aboriginal community will follow the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010). The purpose of the Aboriginal community consultation will be to provide sufficient information for the assessment of Aboriginal cultural heritage values and to inform the Aboriginal Cultural Heritage Assessment. This will assist with the possible application for an AHIP, and will assist the Office of Environment and Heritage in consideration and determination of the AHIP application.

Aboriginal cultural heritage assessment process

The assessment process includes the following steps:

Background research

Background research has been undertaken in order to identify known Aboriginal sites, areas of potential archaeological sensitivity and previous disturbance, and inform the predictive modelling for the assessment area. Background research for the project included the following tasks:

- conduct heritage register searches to identify previously recorded cultural heritage sites in or within the vicinity of the proposed study area including:
 - Aboriginal Heritage Information Management System (AHIMS) (Figure 3)
 - National Heritage List
 - Commonwealth Heritage List
 - Register of the National Estate
 - State Heritage Register
 - Local Environmental Plan
 - National Trust heritage lists.
- conduct additional background research in order to recognise any identifiable regional trends in site distribution and location and provide a site prediction model for the study area
- undertake a comprehensive survey of the study area, identifying any previously recorded sites (on AHIMS)
- record and assess sites identified during the survey in compliance with the guidelines issued by the OEH
- assess the scientific significance of all identified Aboriginal cultural heritage sites and places
- identify impacts to all identified Aboriginal cultural heritage sites and places based on potential ground disturbance from the proposed works
- make recommendations to minimise or mitigate potential impacts of the proposed works upon cultural heritage values within the study area.

Consultation with the Aboriginal community

This task will allow the Aboriginal community the opportunity to participate in decisions regarding the management of their cultural heritage by providing proponents information regarding cultural significance and input into management options.

Consultation with Aboriginal stakeholders under the DECCW (2010) consultation guidelines is being undertaken to assist Habitat Planning on behalf of the proponent, A. P. Delaney & Co Pty Ltd by:

- providing relevant information about the cultural significance and values of the Aboriginal object(s) and/or place(s) within the study area
- influencing the design of the method to assess cultural and scientific significance of Aboriginal objects(s) and/or place(s) within the study area
- actively contributing to the development of cultural heritage management plan options and recommendations for any Aboriginal object(s) and/or place(s) within the proposed study area
- commenting on the draft assessment reports.

Aboriginal community consultation will be undertaken in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010), which includes:

- **Completed:** Ascertaining the names of Aboriginal people or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/ or places within the proposed study area. This would include writing to the following:
 - Office of Environment and Heritage (OEH)
 - Local Aboriginal Land Council (LALC)
 - Office of the Registrar (Aboriginal Land Rights Act 1983)
 - National Native Title Tribunal (NNTT)
 - Native Title Services Corporation Limited (NTSCORP Limited)
 - Relevant Local Councils
 - Relevant Catchment Management Authorities.
- **Completed:** Biosis will undertake the 'Placement of Notification' (Public Notice) in the *Border Mail*, on behalf of Client, that must include details of the proponent, the project, the exact location, and statement of the purpose of the community consultation in preparation for possible test excavations and AHIPs. The Public Notice is also an invitation for Aboriginal people who hold relevant cultural knowledge about the study area. A closing date for the registration must be included and be no less than **14 days. Registration closed on 13 August 2018.**
- **Completed:** Aboriginal people or groups identified would be provided with notification of the proposed project via Biosis and given the opportunity to be involved in consultation. **Registrations of interest closed on 13 August 2018.**
- **Completed:** A list of Aboriginal people or groups who register an interest in the project will be forwarded to the Office of Environment and Heritage (OEH) and the LALC by Biosis no later than **28 days** following close of registration.
- Biosis will provide details of the project and methodology for the archaeological assessment to the registered parties. The registered Aboriginal parties must be given an opportunity to review and provide feedback to the proponent within a minimum of **28 days** of the Biosis providing the methodology document. **Comment period ends 12 September 2018.**
- Representatives of the Registered Aboriginal Parties will be given the opportunity to participate in a field survey and test excavations (if required) of the project area.
- The DRAFT Aboriginal Cultural Heritage Assessment Report and Archaeological Report will be provided to all registered Aboriginal parties for comment – the proponent must allow **28 days** for comment. All comments and correspondence sent and received regarding the project will be included in the final report in an Appendix.

Field survey

An Aboriginal archaeological survey of the assessment area will be undertaken in accordance with the guidelines outlined in the *Code of Practice for Archaeological Investigations of Aboriginal Objects in New South Wales* (DECCW 2010) in order to identify any previously unknown Aboriginal objects, sites or places, should they be present. If identified, these will be recorded to the standard set by OEH.

Any known sites identified by the AHIMS search which are within the assessment area will be inspected to determine their current condition. Registered sites in the near vicinity will also be visited to ensure they will not be impacted by the proposed works.

This task will also assist in the assessment of disturbance and assist with predictive modelling for areas of potential archaeological deposit and assessment of whether the proposed excavation works are likely to impact on undiscovered Aboriginal artefacts.

Test excavation

If the survey identifies the need for further assessment in the form of test excavations, these will be undertaken in accordance with The Code. Further information on the methodology for this test excavation and the areas of potential archaeological deposit within the study area is available in the project methodology.

Reporting

A draft report will be prepared in accordance with the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* and will include:

- background and project description
- a summary and analysis of the findings including the presence and location of registered or new identified Aboriginal artefacts or heritage items within the study area
- a summary of any other relevant studies or surveys which have relevance to the assessment area.
- a summary of the landscape features of the site which may indicate a history of Aboriginal activity
- a summary of previous land use that may have affected the retention of intact Aboriginal archaeology in the landscape
- the potential or likelihood for the proposed works to uncover or expose potential undiscovered Aboriginal objects
- survey and test excavation results
- legislative implications of the proposed works
- recommendations and justification for further assessment (if required)
- mitigation measures (if any) required for the works to proceed

- mapping will be carried out to show the location of registered and newly located (if any) Aboriginal sites in relation to the proposed works.

Registered Aboriginal parties will be provided with the draft report for comment and allowed 28 days for review. The final report will incorporate all comments.

Project schedule

The proposed schedule and broad time allocations for the consultation stages are summarised below.

Action	Timeframe	Notes
Commencement of Aboriginal community consultation – advertising of project, Notification to stakeholders etc.	Completed	Notices sent to stakeholders Monday 3 July 2018. Project advertised in <i>Border Mail</i> on 28 July 2018.
Aboriginal stakeholder registration period	Completed	Ended 13 August 2018
Provision of DRAFT Methodology Document to registered Aboriginal stakeholders for review and comment – these methods will form the basis for all archaeological and cultural heritage work	14 August to 12 September 2018	28 days review time allowed under OEH Aboriginal community consultation guidelines
Field survey	18 to 20 September 2018	Biosis will be in touch to confirm these dates.
Test excavations (if required)	TBC	Dates to be confirmed
Information gathering	TBC	Until finalisation of the report
Review of the draft report	TBC	28 days review time allowed under OEH Aboriginal community consultation guidelines
Completion and finalisation of report	TBC	

Responsibilities and roles

As part of the consultation process registered Aboriginal parties are invited to respond to requests for cultural information and comment on draft reporting, as appropriate in accordance with their role specified in the guidelines (DECCW 2010a, p. 16). Biosis and the proponent, in accordance with their role under the guidelines, will consult with the Aboriginal community by supplying suitable project information and providing the opportunity for Aboriginal stakeholders to provide input into the heritage management process (DECCW 2010a, pp. 16-17).

Each section of the methodology will be undertaken in consultation with the Aboriginal stakeholders. Biosis invites Aboriginal stakeholders to provide culturally appropriate information via mail, email or phone with regards to this project.

Cultural information provided will be recorded in the Aboriginal consultation log and discussed in the report. If the information is regarded as too sensitive to be made public then the Aboriginal stakeholder should advise Biosis and identify the nature of the sensitivity. Biosis will then arrange for the recording of the information in accordance with its sensitivity. Documents which hold sensitive information will clearly list, on the front cover, who can have access to the document. These documents will be stored securely.

References

Department of Environment, Climate Change and Water. 2010a. Code of practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010. NSW Department of Environment, Climate Change and Water, Sydney NSW.

Department of Environment, Climate Change and Water. 2010b. Aboriginal cultural heritage consultation requirements for proponents 2010. NSW Department of Environment, Climate Change and Water, Sydney NSW.

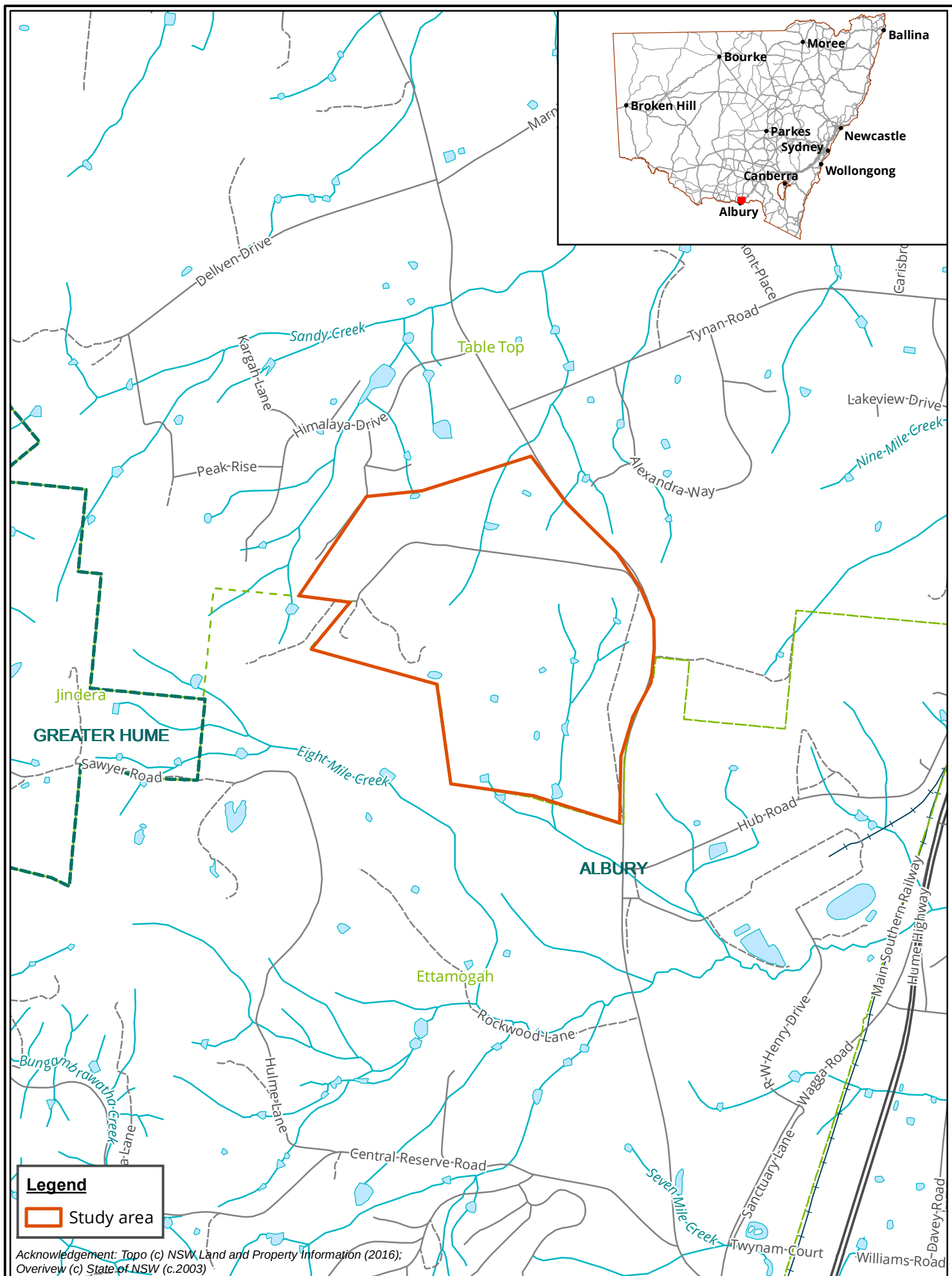
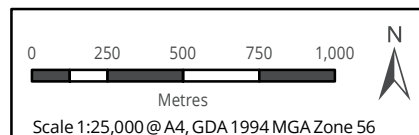


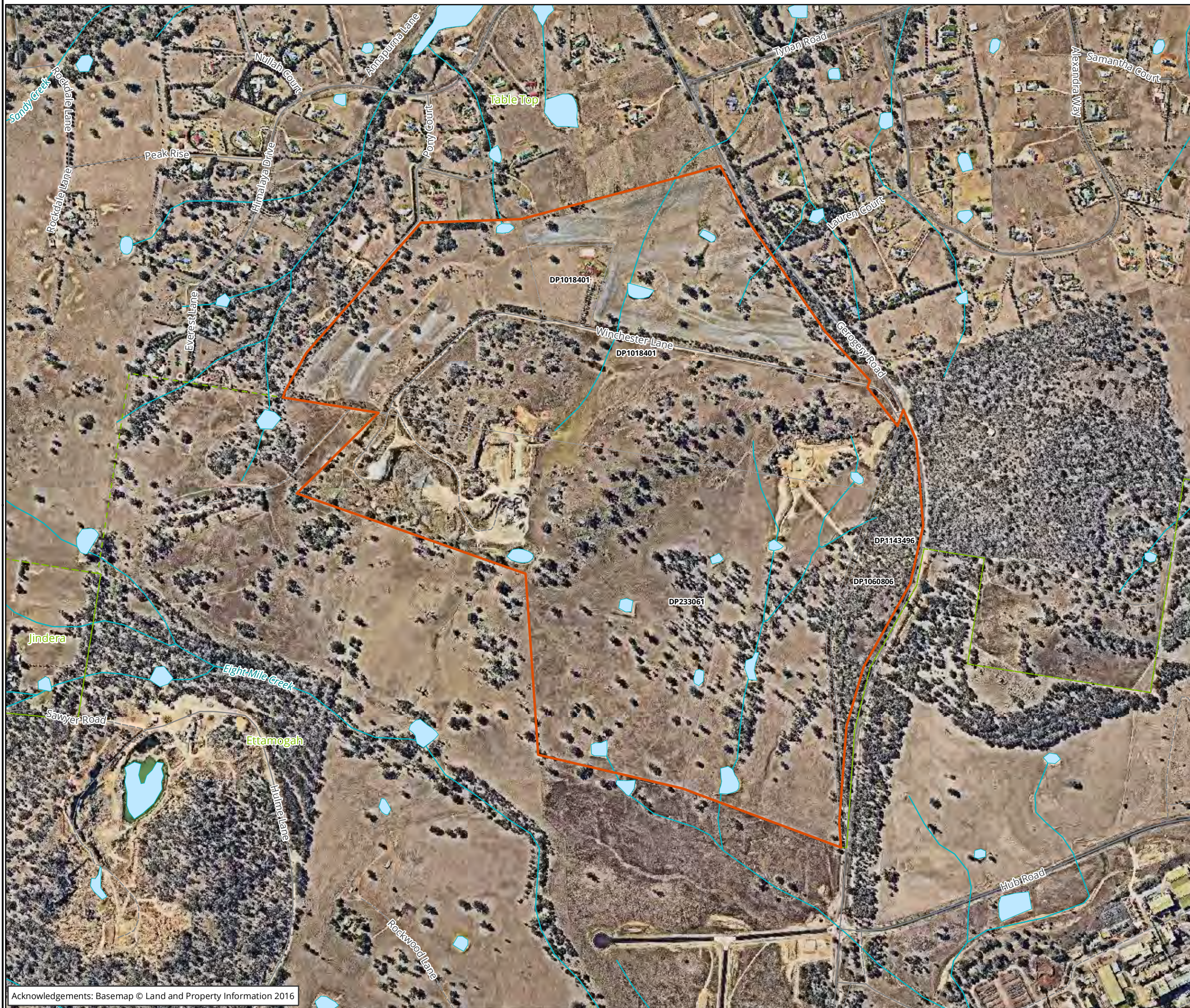
Figure 1: Location of the study area



Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

Matter: 27381
Date: 14 August 2018,
Checked by: AE, Drawn by: DK, Last edited by: dkazemi
Location: P:\27300s\27381\Mapping\





Legend

Study area

Figure 2: Location of the study area

0 110 220 330 440 550
Metres

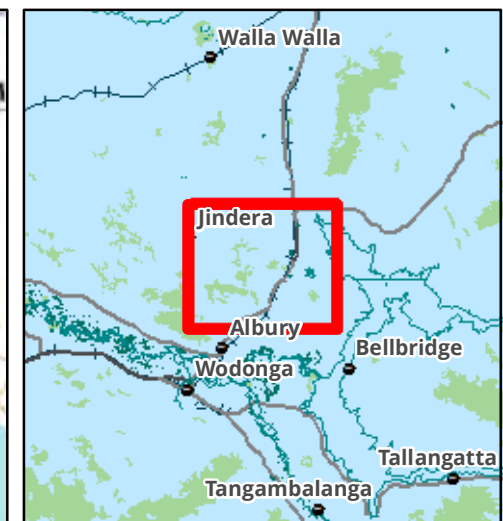
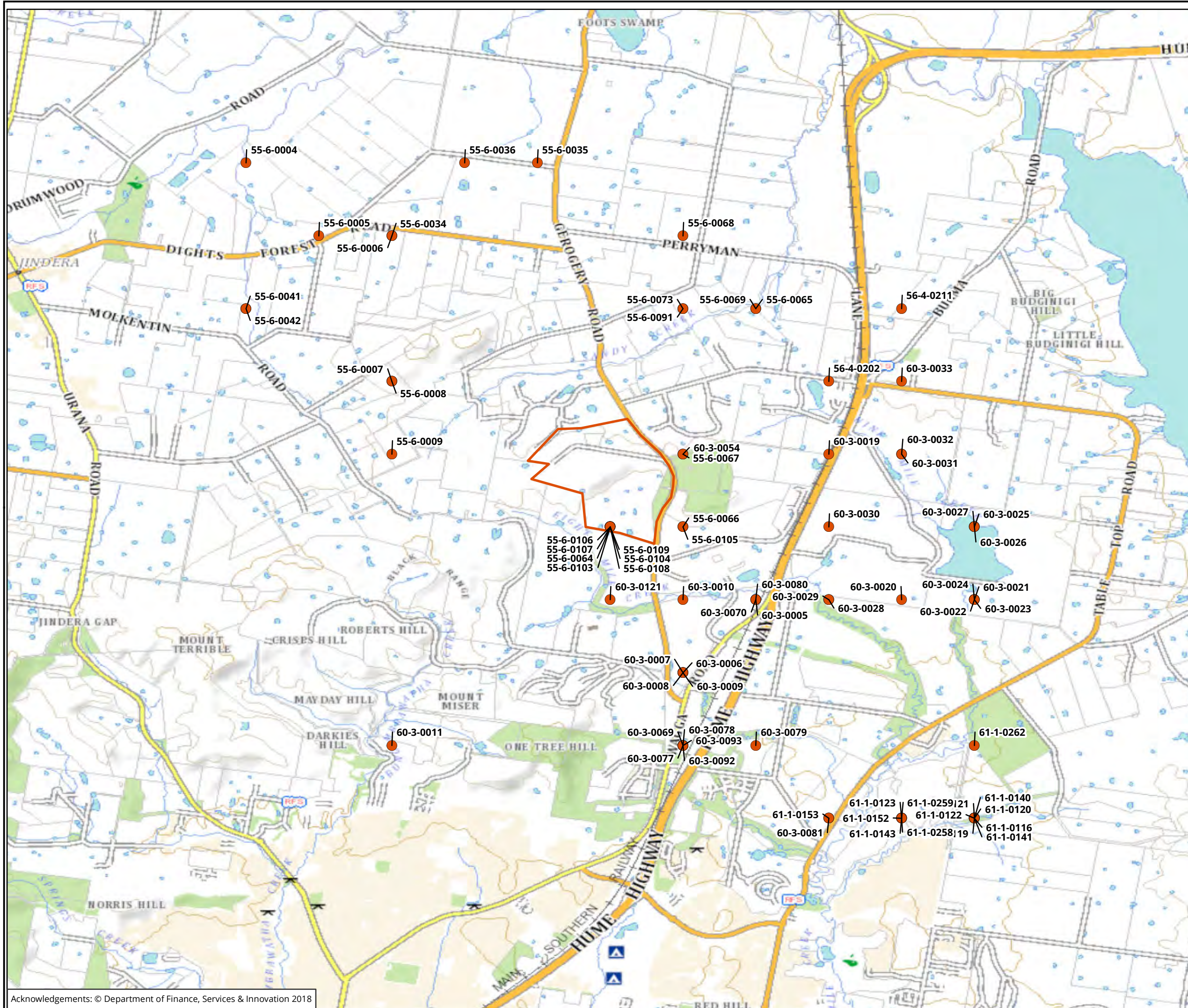
Scale: 1:10,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55



Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

Matter: 27381,
Date: 14 August 2018,
Checked by: AE, Drawn by: DK, Last edited by: dkazemi
Location: P:\27300s\27381\Mapping\27381 F2 ProjectArea.mxd

Acknowledgements: Basemap © Land and Property Information 2016



Legend

- Study area
- AHIMS Record

Figure 3: AHIMS records near the study area

NOT TO BE MADE PUBLIC

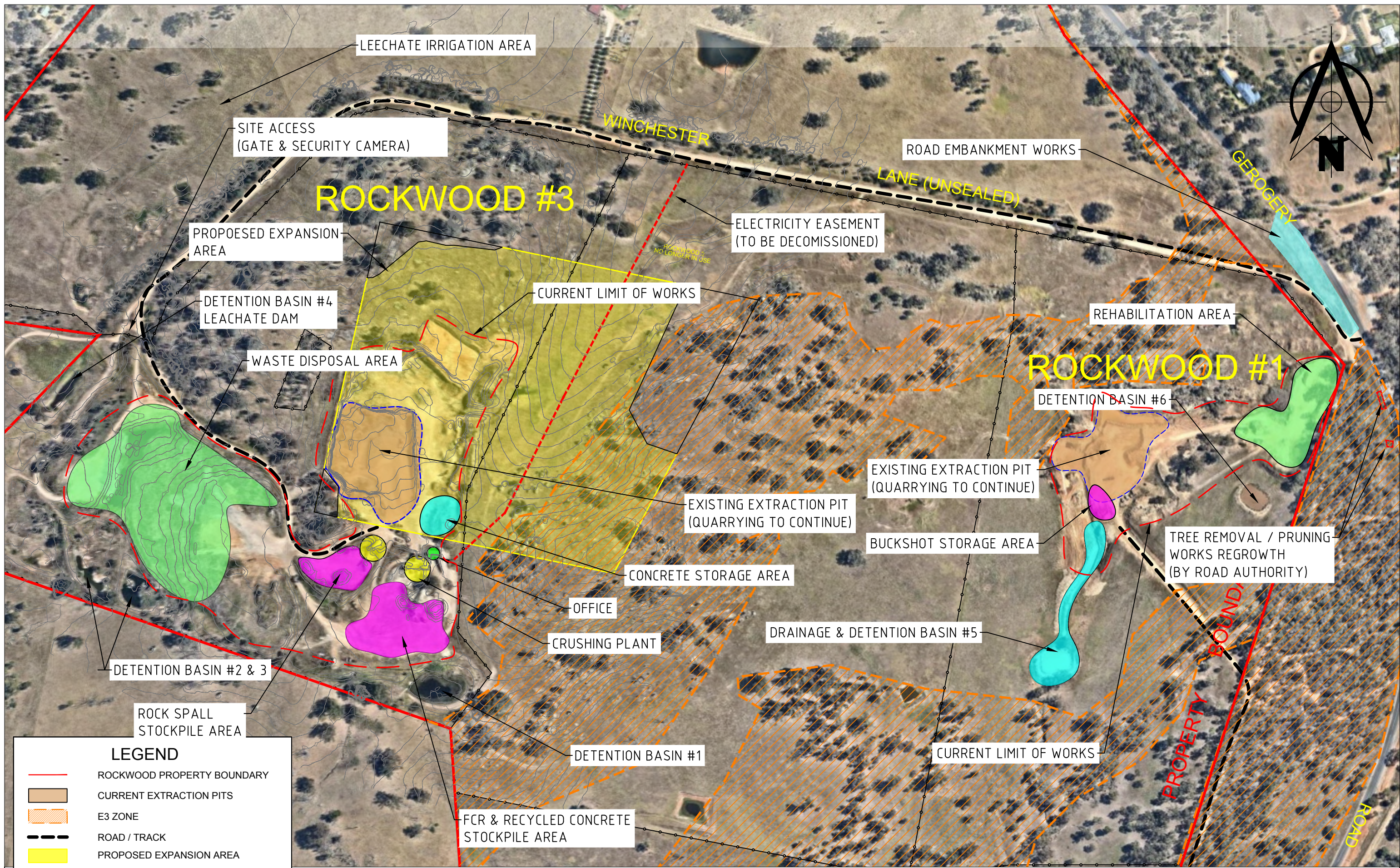
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Metres

Scale: 1:54,000 @ A3
Coordinate System: GCS GDA 1994



Ballarat, Brisbane, Canberra, Melbourne,
Sydney, Wangaratta & Wollongong

Matter: 27381
Date: 14 August 2018,
Checked by: dkazemi, Generated by: dkazemi
Location: P:\27300s\27381\Mapping\27381_F3_AHIMS.mxd



Appendix 4 Stage 3: Project Methodology

14 August 2018

Sam Kirby
Albury and District Local Aboriginal Land Council
PO Box 22
Lavington NSW 2641
LALC-ALBURY@outlook.com

Dear Sam,

RE: Proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table Top, NSW

Our Ref: Matter 27381

This letter is being provided to all the Registered Aboriginal Parties (RAPs) who registered their interest in the consultation process for the proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table Top being undertaken by A. P. Delaney & Co Pty Ltd (the proponent).

In accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010), we provide the proposed methodology for a survey and test excavations for your review and feedback.

Feedback on the methodology presented in this letter must be received by Biosis Pty Ltd by **5pm Wednesday 12 September 2018** either by email, phone or mail.

Please address feedback on the methodology to:

**William Truscott
Biosis Pty Ltd
PO Box 3279
Albury NSW 2640
wtruscott@biosis.com.au**

Please do not hesitate to contact me if you require additional information or have any queries about the methodology or information provided.

Yours sincerely



William Truscott
Archaeologist
Mobile
0429 197 686
wtruscott@biosis.com.au

Stage 3: Proposed granite quarry extension (additional areas) at 208 Winchester Lane, Table Top - Aboriginal Cultural Heritage Assessment: Methodology for Survey and Test Excavations

The following information has been provided in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010). The aim of this document is to provide registered Aboriginal parties (RAPs) with the proposed methodology for the cultural heritage and archaeological assessment.

Assessment Methodology

Aims of the Survey

The principle aims of the survey are to:

- provide RAPs an opportunity to view the study area and to discuss previously identified Aboriginal object(s) and/or place(s) in or within close proximity to the study area
- to undertake a systematic survey of the study area, while targeting areas with the potential for Aboriginal heritage
- identify and record Aboriginal archaeological sites visible on the ground surface.

Survey Methodology

The archaeological survey will be conducted on foot. Recording during the survey will follow the archaeological survey requirements of the Code and industry best practice methodology. Information that will be recorded during the survey includes:

- Aboriginal objects or sites present in the study area during the survey
- survey coverage
- any resources that may have potentially have been exploited by Aboriginal people
- landform elements, distinguishable areas of land approximately 40 metres across or with a 20 metres radius
- photographs of the site indicating landform
- ground surface visibility and areas of exposure
- observable past or present disturbances to the landscape from human or animal activities
- Aboriginal artefacts, culturally modified trees or any other Aboriginal sites.

Where possible, the identification of natural soil deposits within the study area will be undertaken. Photographs and recording techniques will be incorporated into the survey including representative photographs of survey units; landform, vegetation coverage, ground surface visibility and the recording of soil information for each survey unit were possible. Any potential Aboriginal objects observed during the survey will be documented and photographed. The location of Aboriginal cultural heritage and points marking the boundary of the landform elements will be recorded using a hand-held Global Positioning System and the Map Grid of Australia (94) coordinate system.

The Aboriginal Cultural Heritage Assessment will involve test excavations (if required) and a possible application for an Aboriginal Heritage Impact Permit (AHIP). The methodology for the test excavations is detailed below.

Aims of the Sub-surface Test Excavations

The principle objectives of the subsurface test excavations are to identify and understand the nature, extent and significance of any archaeological sites located within areas of archaeological potential (where identified).

The aims of the testing program are to:

- determine whether sub-surface archaeological deposits exist which may be impacted by the development
- if so, to determine the extent and nature of such deposits
- identify if the archaeological material occurs in an intact, undisturbed context, by examining the soil profile and stratigraphy
- analyse and interpret any archaeological finds recovered during the testing program
- inform current knowledge of Aboriginal occupation and land use models of the region
- provide management and mitigation measures for Aboriginal archaeological objects located during the subsurface testing program.

Test Excavation Sampling Strategy

Test excavations across the PADs will conform to the following methodology:

- Test excavations will be undertaken in areas identified as having the potential to contain Aboriginal cultural material.
- Linear transects will be placed across any identified PADs along which test pits will be excavated at regular intervals.
- Test excavation units will consist of 50 x 50 centimetre test pits, in order to determine the nature of sub-surface deposit and presence of any possible archaeological deposits.
- Test excavations units must be excavated using hand tools only including spades, handle shovels, and trowels.
- The first test excavation unit will be excavated and documented in 5 centimetre spits. Based on the evidence of the first excavation unit, 10 centimetre spits or sediment profile/stratigraphic excavation (whichever is smaller) will then be implemented.
- All material excavated from the test excavation units must be sieved using nested 5 millimetre aperture wire-mesh sieves.
- Test excavation units must be excavated to at least the base of the identified Aboriginal object-bearing units, and must continue to confirm the soils below are culturally sterile.

- All cultural material will be collected, bagged and clearly labelled. They will be temporarily stored in the Biosis office for analysis (593a Macauley Street, Albury NSW 2640).
- For each test pit that is excavated, the following documentation will be taken:
 - unique test pit identification number
 - GPS coordinate of each test pit
 - Munsell soil colour, texture and pH
 - amount and location of cultural material within the deposit
 - nature of disturbance where present
 - stratigraphy
 - archaeological features (if present)
 - photographic records
 - spit records.
- Test excavation units must be backfilled as soon as practicable due to safety issues.

Following test excavation, an Aboriginal Site Recording form must be completed and submitted to the AHIMS Registrar, as soon as practicable, for each AHIMS site that has been identified.

Standard protocol for the discovery of any human remains is to be followed in the event that human remains are discovered.

Appendix 5 Stage 4: Review of draft cultural heritage assessment report

From: [yalmambirra yalmambirra](#)
To: [Meaghan Aitchison](#)
Subject: RE: Rockwood Quarry Additional Areas
Date: Tuesday, 19 March 2019 8:06:30 PM
Attachments: [image67c45b.PNG](#)

Hullo Meaghan

I am quite happy with the way in which the survey was undertaken Meaghan and I am happy with the consultation process and the way that it was conducted.

It would be good to have a additional 'walk' around in the future to support the work we did.

Many thanks Meaghan for thinking of me. Please travel safely and have a great day...

Yalmambirra

Sent from [Mail](#) for Windows 10

From: Meaghan Aitchison
Sent: Monday, March 18, 2019 1:53:36 PM
To: 'yalmambirra@outlook.com'
Cc: Kylie Mcfadyen; Melanie Thomson
Subject: Rockwood Quarry Additional Areas

Hi Yalmambirra,

Just a quick email to see if you have had a chance to look at the report for the Rockwood Quarry that we completed fieldwork for last year?

Did you have any comments to add regarding the study area and our investigations?

Kind Regards,

Meaghan

Meaghan Aitchison

Archaeologist

M: 0408 493 109

D: (02) 6069 9205

E: maitchison@biosis.com.au

[Biosis Logo](#)



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From: [Meaghan Aitchison](#)
To: ["yalmambirra yalmambirra"](#)
Subject: Rockwood Quarry Additional Areas
Date: Monday, 24 June 2019 2:05:19 PM
Attachments: [imagef9271f.PNG](#)

Hello Yal,

Thank you for taking the time to chat over the phone.

Just to recap our conversation regarding the culturally modified tree (AHIMS site 55-6-0064) which we were unable to relocate during the site survey for the proposed Rockwood Quarry Extension:

- The site mapped as AHIMS 55-6-0064 was not located within the southern portion of the proposed Rockwood Quarry study area,
- It has likely been either **a)** removed/destroyed or **b)** incorrectly mapped and was not originally located in the immediate vicinity of the study area
- A further investigation outside the study area and its immediate vicinity to further confirm its destruction or correctly attribute its location is warranted in the future
- As the culturally modified tree is not located within the study area, the proposed activity does not pose any harm to the site
- Those sites mapped as being located immediately adjacent the southern extent of the study area are associated with a previous ACHA/AHIP undertaken in 2017 and were subject to surface salvage and reburial. These sites were likely disturbed during road works for the subdivision of land immediately south of the current study area.
- While works are not currently proposed along the southern boundary of the current study area, should groundbreaking activity be undertaken in the future, it is recommended that a Monitor be present onsite during works and any additional Aboriginal cultural heritage material be recorded and treated in accordance with the Act.

Please let me know if I have missed anything or if you have any additional comments you would like added to the report.

Kindest Regards,

Meaghan

Meaghan Aitchison
Archaeologist

M: 0408 493 109
D: (02) 6069 9205
E: maitchison@biosis.com.au



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Appendix 6 Archaeological report

Rockwood Quarry, Additional Areas
208 Winchester Lane, Table Top:
Aboriginal Cultural Heritage Assessment
Report
Archaeological Report

UPDATED FINAL REPORT

Prepared for Habitat Planning on behalf of A. P. Delaney & Co Pty Ltd

11 March 2020

Biosis offices

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Document information

Report to:	Habitat Planning on behalf of A. P. Delaney & Co Pty Ltd
Prepared by:	Meaghan Aitchison and William Truscott
Biosis project no.:	27381
File name:	27381.Rockwood.Additional.Areas.AR.FIN03.20200303
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LGA:	Albury City

Document control

Version	Internal reviewer	Date issued	Issued by
Draft 01	Erica Walther	07/02/2019	Biosis Pty Ltd
Final 01	Meaghan Aitchison	01/04/2019	Biosis Pty Ltd
Final 02	Yalmambirra	19/03/2019	Yalmambirra
Final 02	Meaghan Aitchison	19/08/2019	Biosis Pty Ltd
Mapping	Kylie McFadyen	25/10/2019	Biosis Pty Ltd
Final 03	Kylie McFadyen	05/03/2020	Biosis Pty Ltd

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Disclaimer:

Biosis Pty Ltd has completed this assessment in accordance with the relevant federal, state and local legislation and current industry best practice. The company accepts no liability for any damages or loss incurred as a result of reliance placed upon the report content or for any purpose other than that for which it was intended.

Acknowledgements

Biosis gratefully acknowledges the contributions of the following people and organisations (listed alphabetically) in preparing this report:

Registered Aboriginal Parties

- Albury Local Aboriginal Land Council (ALALC).
- Yalmambirra
- Wiradjuri Council of Elders

Government Departments

- Office of Environment and Heritage (OEH)
- National Native Title Tribunal (NNTT).

Client

- Matt Johnson, Habitat Planning

Biosis

- Meaghan Aitchison for assistance in the field
- Thomas Crowe for assistance in the field
- David Kazemi for mapping
- Jason Prasad for mapping
- Julian Turner for mapping
- William Truscott for assistance in the field
- Christine Morgan for assistance in the field

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Glossary

ACHAR	Aboriginal Cultural Heritage Assessment Report
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
ALALC	Albury Local Aboriginal Land Council
Consultation requirements	<i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> (DECCW 2010a)
DA	Determining Authority
DECCW	Department of Environment, Climate Change and Water (now OEH)
DP	Deposited Plan
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
GDA	Geocentric Datum of Australia
GPS	Global Positioning System
GSV	Ground Surface Visibility
Heritage Act	<i>NSW Heritage Act 1977</i>
ICOMOS	International Council on Monuments and Sites
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
MGA	Map Grid of Australia
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NPWS	National Parks and Wildlife Service
NSW	New South Wales
OEH	NSW Office of Environment and Heritage
PAD	Potential Archaeological Deposit
RAP	Registered Aboriginal Party
REF	Review of Environmental Factors
REP	Regional Environmental Plan
SEPP	State Environmental Planning Policy
the code	<i>Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW</i> (DECCW 2010)

Summary

Biosis Pty Ltd was commissioned by Habitat Planning on behalf of A. P. Delaney & Co Pty Ltd, to undertake an Aboriginal cultural heritage assessment for the proposed future extension at the Rockwood Quarry (the study area). The study area is located approximately 10.9 kilometres north-east of Albury and approximately 10.9 kilometres north-east of the Albury central business district (CBD).

One Aboriginal cultural heritage site (AHIMS 55-6-0064) is registered with the Aboriginal Heritage Information Management System (AHIMS) register within the study area. There are no Aboriginal cultural heritage sites registered with the Aboriginal Heritage Information Management System (AHIMS) register within the study area.

Albury City Council is the Determining Authority (DA) and will assess Environmental Impact Statement (EIS) to help them determine if the proposed development is likely to have a significant effect on the environment, including Aboriginal cultural heritage.

The Aboriginal community was consulted regarding the heritage management of the project throughout its lifespan. Consultation has been undertaken as per the process outlined in the DECCW document, *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a) (consultation requirements).

The survey was conducted on 18, 19 and 20 September 2018. The overall effectiveness of the survey for examining the ground for Aboriginal sites was deemed low. This was attributed to vegetation cover restricting ground surface visibility (GSV) combined with a low amount of exposures.

No previously unrecorded Aboriginal cultural heritage sites were identified during the field survey.

A modified tree (AHIMS 55-6-0064 mungabareena-mm1) was unable to be relocated during the field survey. Following consultation with RAPs an Aboriginal Site Impact Recording Form was submitted to the AHIMS Registrar and the site subsequently recorded as destroyed.

A further survey was conducted on 26 February 2020 to ground truth the results of the initial survey with regards to the location of AHIMS 55-6-0064 mungabareena-mm1. All mature standing and fallen trees within the southern portion of the study area were closely inspected for evidence of cultural modification. One scarred tree was identified within the study area. RAPs present on site concluded that this newly identified tree was actually mungabareena-mm1. A site update was subsequently submitted to AHIMS. At the time of writing, this update was awaiting approval.

No areas of (archaeological) sensitivity were identified.

Two PADs were identified. A subsurface testing program included the excavation of ten 50 x 50 centimetre test pits. No Aboriginal sites were identified.

There is a low potential for development activities to impact Aboriginal sites and the unidentified sites or areas of (archaeological) sensitivity.

Strategies have been developed based on the archaeological (significance) of cultural heritage relevant to the study area. The strategies also take into consideration:

- predicted impacts to Aboriginal cultural heritage
- the planning approvals framework
- current best conservation practice, widely considered to include:
 - the ethos of the Australia International Council on Monuments and Sites (ICOMOS) Burra Charter

- the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010) (the code).

The recommendations that resulted from the consultation process are provided below.

Management recommendations

Prior to any development impacts occurring within the study area, the following is recommended:

Recommendation 1: Protection of mungabareena-mm1 (AHIMS 55-6-0064)

Works *must* avoid the Aboriginal site identified as mungabareena-mm1 (AHIMS 55-6-0064) as per the current design plans detailed in this report. A *minimum* 10 metre buffer around the tree should be in place to protect the tree root zone. This buffer should be clearly defined through the installation of fencing around the tree.

Recommendation 2: No further assessment is required

No further archaeological investigation or works are required to be undertaken for the study area. Should the proposed works extend beyond the current design plans, further archaeological assessment will be required. This would include consultation with RAPs and may include further archaeological survey.

In the event that unexpected find, including human remains, are unearthed during any phase of the project please refer to Recommendations 2 and 3 below.

Recommendation 3: Stop work provision for any potential heritage sites identified during the project

All Aboriginal places and objects are protected under the NPW Act. This protection extends to Aboriginal objects and places that have not been identified but might be unearthed during construction.

If construction proceeds without an approved AHIP, work must cease if Aboriginal objects or places are identified. If an Aboriginal object is discovered and/or harmed in, or under the land, while undertaking development activities, the proponent must:

- Immediately cease work at the location
- Secure the area to ensure no further harm to the Aboriginal object
- Notify OEH as soon as practical on 131555, providing details of the Aboriginal object and its location
- Not recommence works without authorised in writing by OEH

Historical archaeological sites are protected under the relics provisions (s139 – 146) of the NSW *Heritage Act* 1977. Should any historical archaeological sites be identified during any phase of the proposed development, all works must cease in the vicinity of the find and the project archaeologist and A. P. Delaney & Co. Pty Ltd notified. Should the archaeological nature of the find be confirmed the Heritage Branch of the NSW Department of Planning, will require notification.

Recommendation 4: Stop work provision for any potential discovery of human remains

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the activity area must follow these steps:

1. **Discovery:** If suspected human remains are discovered all activity in the vicinity must stop IMMEDIATELY to ensure minimal damage is caused to the remains; and the remains must be left in

place, the area secured to prevent unauthorised access and the remains protected from harm or damage.

2. **Notification:** Once suspected human skeletal remains have been found, the NSW Police and Coroner's Office must be notified immediately. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and OEH NSW. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW will be notified of the find under s.146 of the *Heritage Act 1977*.

Recommendation 5: Continued consultation with the registered Aboriginal stakeholders

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010), it is recommended that the proponent provides a copy of this draft report to the Aboriginal stakeholders and considers all comments received. The proponent should continue to inform these groups about the management of Aboriginal cultural heritage within the Study Area throughout the life of the project.

1 Introduction

1.1 Project background

Biosis Pty Ltd was commissioned by Habitat Planning on behalf of the proponent, A. P. Delaney & Co Pty Ltd to undertake an Aboriginal archaeological investigation for additional areas and activities in relation to the 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW (Figure 3). The NSW Office of Environment and Heritage (OEH) have directed the proponent to conduct an Aboriginal cultural heritage assessment (ACHA) for additional areas and activities in relation to the Rockwood quarry as a part of an Environmental Impact Statement (EIS).

This investigation has been carried out under Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act). It has been undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010) (the code). The code has been developed to support the process of investigating and assessing Aboriginal cultural heritage by specifying the minimum standards for archaeological investigation undertaken in NSW under the NPW Act. The archaeological investigation must be undertaken in accordance with the requirements of the code.

It is stated in Section 1.2 of the code that where the Aboriginal cultural heritage assessment concludes that the proposed activity will result in harm to Aboriginal objects or declared Aboriginal Places, an application for an Aboriginal Heritage Impact Permit (AHIP) will be required. This application must be supported by an Aboriginal Cultural Heritage Assessment Report (ACHAR).

The *Environmental Planning and Assessment Act 1979* (EP&A Act) includes provisions for local government authorities to consider environmental impacts in land-use planning and decision making. Each Local Government Area (LGA) is required to create and maintain a Local Environmental Plan (LEP) that includes Aboriginal and historical heritage items. Local Councils identify items that are of significance within their LGA, and these items are listed on heritage schedules in the local LEP and are protected under the EP&A Act and *Heritage Act*.

1.2 Study area

The study area is located approximately 10.9 kilometres north east of Albury and is contained within portions of Lot 2 in DP 1018401 and Lot 3 in DP 233061 (Figure 1).

The study area is within the:

- City of Albury LGA
- Parish of Jindera
- County of Goulburn.

The study area is located within the boundaries of Rockwood Quarry, 180 metres south west and 270 metres east of Winchester Lane and 730 metres west of Gerogery Road (Figure 2).

1.3 Planning approvals

Secretary's Environmental Assessment Requirements (SEARS) have been issued for the development (EAR1075). The project is a designated development under Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*.

The proposed development will be assessed as designated development under the EP&A Act. Other relevant legislation and planning instruments that will inform this assessment include:

- Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*
- NPW Act
- NSW *National Parks and Wildlife Amendment Act 2010*
- Albury LEP
- Albury Development Control Plan 2010.

1.4 Objectives of the investigation

The objectives of the investigation can be summarised as follows:

- To identify and consult with any registered Aboriginal stakeholders and the Albury Local Aboriginal Land Council (LALC).
- To conduct additional background research in order to recognise any identifiable trends in site distribution and location.
- To search statutory and non-statutory registers and planning instruments to identify listed Aboriginal cultural heritage sites within the study area.
- To highlight environmental information considered relevant to past Aboriginal occupation of the locality and associated land use and the identification and integrity/preservation of Aboriginal sites.
- To summarise past Aboriginal occupation in the locality of the study area using ethnohistory and the archaeological record.
- To formulate a model to broadly predict the type and character of Aboriginal sites likely to exist throughout the study area, their location, frequency and integrity.
- To conduct a field survey of the study area to locate unrecorded or previously recorded Aboriginal sites and to further assess the archaeological potential of the study area.
- To assess the significance of any known Aboriginal sites in consultation with the Aboriginal community.
- To identify the impacts of the proposed development on any known or potential Aboriginal sites within the study area.
- To recommend strategies for the management of Aboriginal cultural heritage within the context of the proposed development.

1.5 Investigators and contributors

The roles, previous experience and qualifications of the Biosis project team involved in the preparation of this archaeological report are described below in Table 1.

Table 1 Investigators and contributors

Name and qualifications	Experience summary	Project role
Will Truscott BA (Hons)	William has eight years' experience as an archaeologist working in Victoria, New South Wales, Western Australia and Tasmania. William has extensive experience conducting archaeological surveys, subsurface testing programs and site salvage programs investigating both Aboriginal and Historical places. As a cultural heritage advisor he has worked with a number of clients including state government agencies, local government agencies, private industry and small scale developers. William has co-authored a range of reports including cultural heritage management plans, Aboriginal and historical heritage assessments and salvage reports and provided support services to consulting archaeologists in their analysis and research. William's qualifications include a Bachelor of Archaeology (Hons) at La Trobe University, Bundoora where he undertook GIS analysis of surface archaeology at Lake Mungo, an area of high significance and one of the lakes in the UNESCO-listed Willandra Lakes World Heritage area. After graduating, William worked for La Trobe University as a research assistant on the Mungo Archaeological Project. As a field archaeologist William has built strong relationships with colleagues, clients, Traditional Owners and Registered Aboriginal Parties. He is methodical in his approach and is committed to producing high-quality products to meet the expectations of clients and compliance regulators.	Project Management Fieldwork Reporting
Meaghan Aitchison BArch (Hons)	Meaghan graduated from the University of New England in 2018 with BA. Hons (Archaeology) and has experience with desktop assessments, both Aboriginal and non-Aboriginal archaeological field surveys, Aboriginal and historical excavations, and the recording and analysis of cultural material. She also has skills in lithic analysis and project management, administrative and client liaison experience.	Fieldwork Reporting

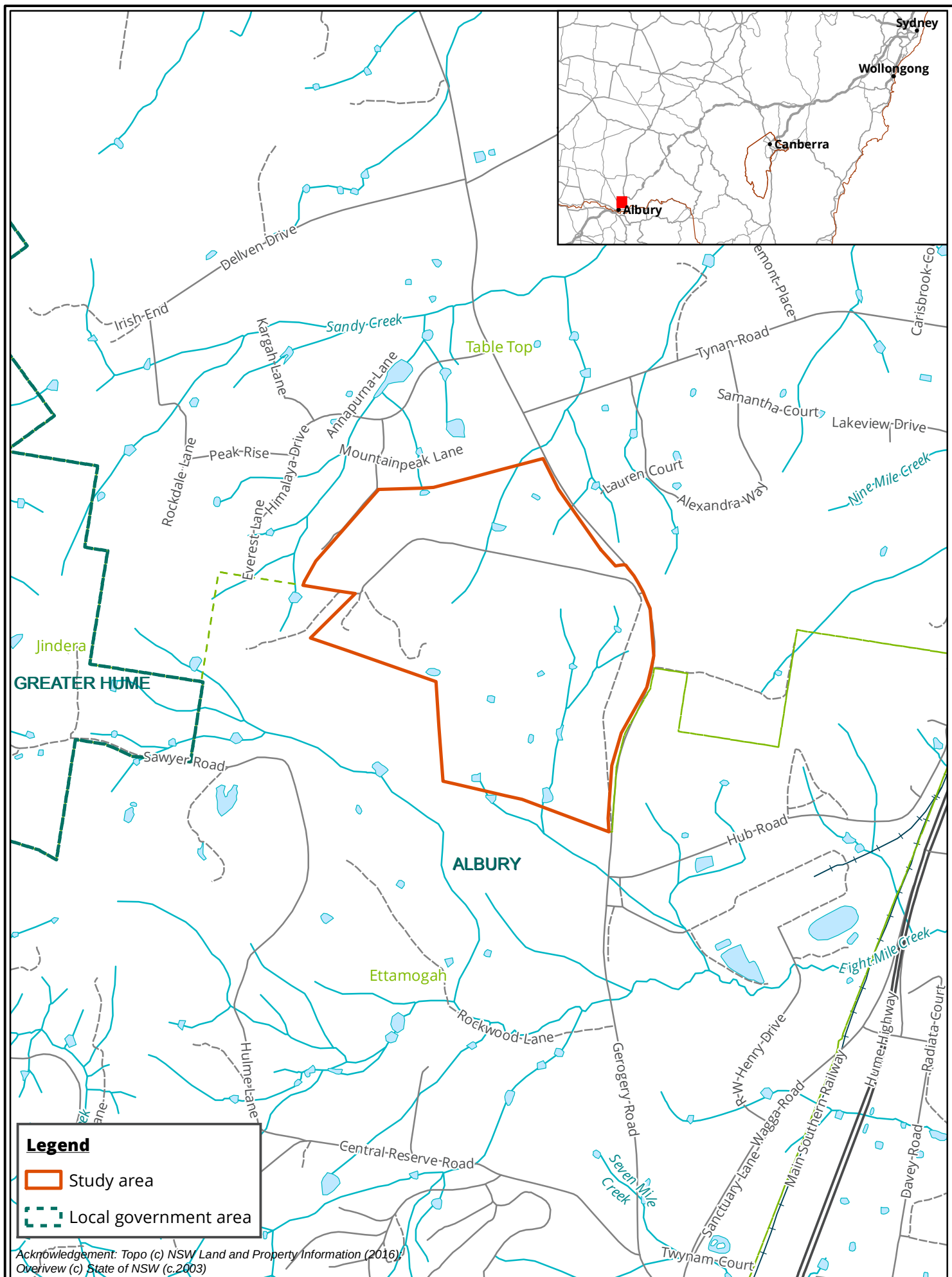


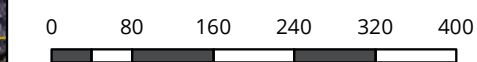
Figure 1 Location of the study area



Legend

 Study area

Figure 2 Location of the study area



Metres
Scale: 1:7,464 @ A3
Coordinate System: GDA 1994 NSW Lambert



Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

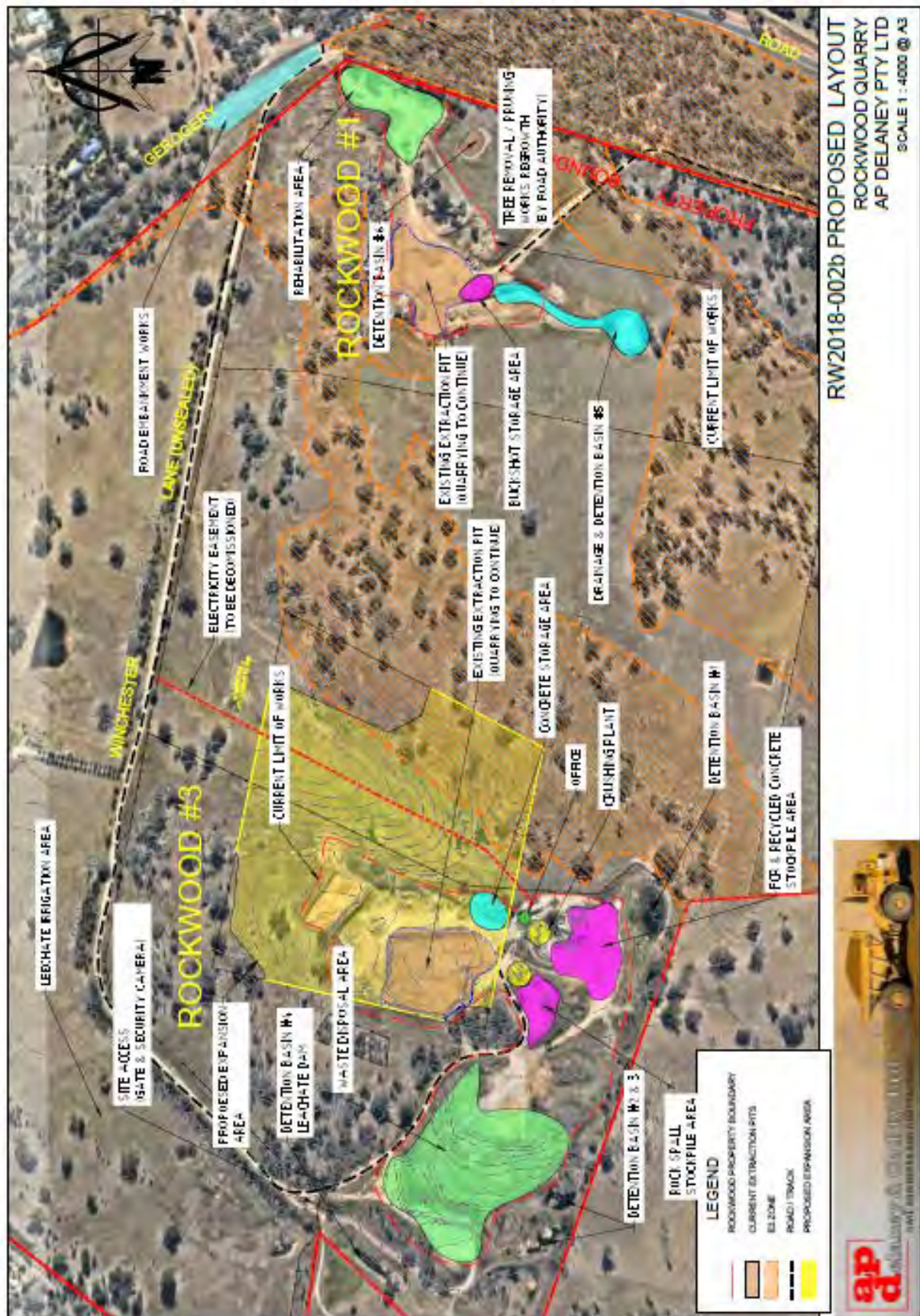
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2 Proposed development

A. P. Delaney & Co Pty Ltd (the proponent) proposes to extend the 'Rockwood' granite quarry at 208 Winchester Lane, Table Top, NSW. The proposed development involves a continuation of an existing extractive industry (Rockwood Quarry), which is currently operating on the subject land, as well as the use of this land to dispose of up to 10,000 tonnes of bio solid waste, the crushing of up to 20,000 tons of recycled concrete and associated ancillary works adjacent existing quarry pits. More specifically, the proponent seeks approval for the continuation of existing extractive industry operations on-site for a period of 30 years, as well as an increase in the annual production of crushed rock from 75,000 cubic metres to 100,000 cubic metres per annum. The quarrying operations onsite are and will continue to be limited to the existing Pit 1 area and an area of 450 metres x 300 metres generally located within the middle of the site surrounding Pit 3. The proposal also includes road embankment works alongside Gerogery Road and the use of an unsealed Crown Travelling Stock Reserve to access Pit 1.

Potential impacts to Aboriginal cultural heritage sites/objects include the significant disturbance of ground of topsoil and the removal of bedrock by blasting and heavy machinery.

Figure 3 Proposed development



3 Desktop assessment

The desktop assessment involves researching and reviewing existing archaeological studies and reports relevant to the study area and surrounding region. This information is combined to develop an Aboriginal site prediction model for the study area, and to identify known Aboriginal sites and/or places recorded in the study area. This desktop assessment has been prepared in accordance with Requirements 1 to 4 of the code.

3.1 Landscape context

It is important to consider the local environment of the study area any heritage assessment. The local environmental characteristics can influence human occupation and associated land use and consequently the distribution and character of cultural material. Environmental characteristics and geomorphological processes can affect the preservation of cultural heritage materials to varying degrees or even destroy them completely. Lastly, landscape features can contribute to the cultural significance that places can have for people.

3.1.1 Topography and hydrology

The study area overlies the Silurian I-type granites geological formation. This formation is 419 to 443 million years old, with granites formed by the melting of igneous source rocks. Common minerals are quartz, feldspar, and biotite, and include granites between Blayney and Cowra, at Jindabyne and in the Snowy Mountains, north of Albury and between Brewarrina and Gongolgon. Bands of quartz would have been available for use in these areas by Aboriginal people for stone tool manufacture.

The study area is located within the South-West Slopes bioregion and overlies the Burrumbuttock Hills and Foothills (Table 2) as defined in version 2 of the Descriptions for NSW (Mitchell) Landscapes (Mitchell, 2002). Landforms in the study area include undulating foot slopes and the creek bank/terraces of Eight Mile Creek.

Stream order is recognised as a factor which assists the development of predictive modelling in New South Wales. Predictive models which have been developed for the region have a tendency to favour higher order streams as the locations of campsites as they would have been more likely to provide a stable source of water and by extension other resources which would have been used by Aboriginal groups.

The stream order system used for this assessment was originally developed by Strahler (1952). It functions by adding two streams of equal order at their confluence to form a higher order stream, as shown in Plate 1. As stream order increases, so does the likelihood that the stream would be a perennial source of water. Such a location is likely to contain more complex sites with a high density of artefacts. Lower order streams are also likely to contain large sites within 100 metres of the watercourse.

A non-perennial first order stream drains north from the centre of the study area, where it joins with another unnamed first order watercourse to form a second order stream approximately 1 kilometres north east of the study area. A number of small, unnamed low order streams run approximately 700 metres to the west and 500 metres east of the study area, downslope of the rise on which the study area is located. The non-perennial third order stream, Eight Mile Creek, flows through a valley an average of 750 metres south-west of the study area.

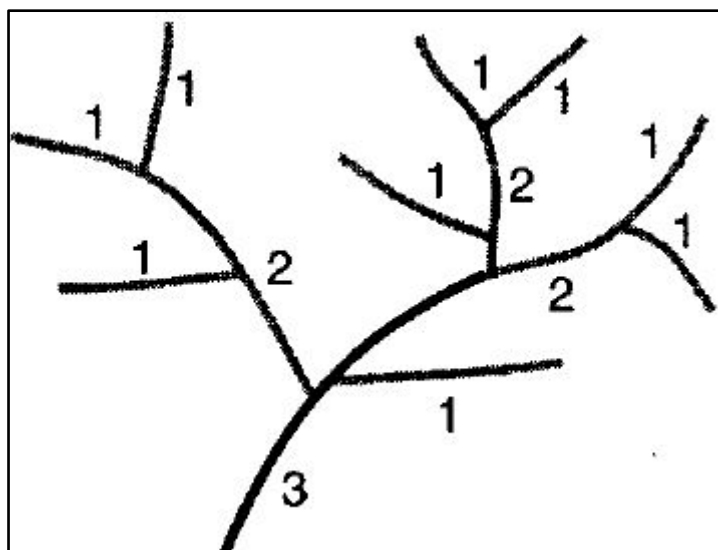


Plate 1 Diagram showing Strahler stream order (Ritter, Kochel, & Miller, 1995, p. 151)

3.1.2 Soil landscapes

Soils are typically coarse sandy red-brown earths and local relief varies between 80 to 100 metres. Proportionally, modified trees are most likely to occur within this landscape, although artefact sites are also common. Sub-soil patterns within this bioregion are derived from the underlying weathered rock with alluvial sands and loams generally more common than clays, alluvial clays being more prominent toward the Riverine Plain (Heritage, NSW Office of Environment and, n.d.).

Alluvium stores a considerable amount of water, and it is likely that alluvial deposits have become more extensive since European settlement due to clearing of native vegetation and the subsequent increase in the erosion of topsoil. There is a high potential for Aboriginal cultural heritage to be found *in situ* when it occurs within deep alluvial deposits.

Table 2 Mitchell landscapes within the study area (Mitchell, 2002)

Mitchell landscape	Description
Burrumbuttock Hills and Footslopes	Rounded isolated hills with moderate slopes on Silurian-Devonian massive granite and granodiorite, general elevation 300 to 490m, local relief 80 to 100m. Coarse sandy red-brown earths with various species of eucalypt and acacia.

3.1.3 Landscape resources

The Albury region would have generally provided a number of resources used by Aboriginal inhabitants. Edible plant materials would have been available in close proximity to the study area, including bracken fern, wattles, native plantain and ground orchids (Table 3). Mammals including kangaroo, emu, and wallaby, would also have provided abundant sources of food. The majority of previously identified artefacts in the local area are comprised of quartz, which is available regionally in exposed reef quartz outcrops (Kelly & Price, 2004, p. 17).

Table 3 Plant Foods Common to the Albury region (Kelly & Price, 2004, p. 16)

Common name	Scientific name	Use
Bracken fern	<i>Pteridium escientum</i>	Roots
Wattles	<i>Acacia spp.</i>	Seeds, gums, medicinal barks and hafting timber
Native plantain	<i>Plantago debilis</i>	Leaves processed and eaten
Common sowthistle	<i>Sonchus oleraceus</i>	Leaves eaten
Milkmaids	<i>Burcharoadia umbellate.</i>	Tubers eaten
Vanilla lilies	<i>Arthropodium milleflorum, a. Minus.</i>	Tubers eaten
Bulbine lily	<i>Bulbine bulbosa.</i>	Tubers eaten
Common fringed lily	<i>Thysanotus tuberosus.</i>	Tubers eaten
Ground orchids	<i>Orchideae. Family</i>	Tubers eaten
Murnong	<i>Microseris scapigera</i>	Tubers eaten
Long leaf mat-rush	<i>Lomandra longifolia</i>	Leaf stems eaten, leaves used for weaving
Dwyer's mallee gum	<i>Eucalyptus dwyeri</i>	Roots

Animals such as brush-tailed possums were highly prized for their fur, with possum skin cloaks worn fastened over one shoulder and under the other. Kangaroo teeth were incorporated into decorative items, such as head bands (Attenbrow, 2002). Kangaroos and emus, although providing plenty of meat were harder to kill. Plant resources were more easily collected and could be used in a variety of ways. Roots could be dug all year. The rhizomes or long roots of the bracken fern of could be chewed or beaten to a sticky starch (Kelly & Price, 2004). Many native lilies, such as the Bulbine and Vanilla lily, had tuberous roots that were collected for food (Patterson, n.d.). Along waterways Long leaf mat-rush was collected and it's leaves used for weaving. Gum trees housed witchetty grubs and the bark of many species was used in the provision of shelter; a large sheet of bark being propped against a stick to form a gunyah (Attenbrow, 2002). The Burrumbuttock Hills and Footslopes Mitchell Landscape region is characterised by various eucalyptus species, including Dwyers mallee gum (Mitchell, 2002). Mallee gums were used for food, their roots drained for water, and boomerangs were cut from their wood (Zola & Gott, 1990, p. 30) As well as being important food sources, animal products were also used for tool making and fashioning a myriad of utilitarian and ceremonial items. For example, tail sinews are known to have been used to make fastening cord, while 'bone points',

which would have functioned as awls or piercers, are often an abundant part of the archaeological record.

3.1.4 Land use history

Albury was first described by Europeans in 1838 as:

Generally undulating open forest, tolerably grassed, but not seemingly so sound as is desirable. On the banks of the [Murray ed.] river are swampy flats of rich soil, covered with reeds and reedy grass, but apparently often flooded and ill-drained. Behind these flats, lagoons are frequently met with. Beside these, are forest flats of inferior soils, with less herbage (Walker, 1938).

Albury was built on the northern bank of the Murray River. The original Indigenous name for the aspect of Albury at the foot of Monument Hill was *Bungambrawatha* and *Yarrowudda* for the area at the western foot of Eastern Hill. Both of these place names were annotated as such on an 1839 map of the area (Spennemann, 2015). The first post-contact settlement of the area was made by Robert Brown who established a hut and store in 1835 near the confluence of Bungambrawatha Creek and the Murray River, around the same area as an Aboriginal camp site (Spennemann, 2015).

European post-contact settlement of the Albury area began in earnest around 1835 with the establishment of the *Mungabareena* run. Squatting increased from 1837 and 1840 when both sides of the Murray were taken up by large grazing runs (Spennemann, 2015).

An early 1892 Parish map shows that the study area was located slightly to the north of the Black Range Gold Fields (Plate 2). The study area is located at the juncture of three 184 to 305 acre land grants to grazier Ancrum Heriot, an early resident of the Albury district. According to parish maps, the land remained within the Heriot family until the 1940s, with land boundaries remaining unchanged (Plate 3).

Quarrying has taken place within the study area since the mid-20th century. A. P. Delaney & Co Pty Ltd purchased the study area in the early 1970s as a source of hill gravel and rock, at which time it was noted the land had already been in use by the Hume Shire Council as a source of hill gravel. The study area continues to be used as a granite quarry today.



Plate 2 1892 parish map, the approximate location of the study area is shown by the red arrow (NSW LPI)



Plate 3 1940 parish map, the approximate location of the study area is shown by the red arrow (NSW LPI)

3.2 Previous archaeological work

According to AHIMS, very few cultural heritage surface (surveys) and limited sub-surface investigations (excavations) have been conducted in the local area in the last 40 years. The previous archaeological work that has been conducted in the area is summarised below.

3.2.1 Regional context

McIntyre (1977) undertook an archaeological survey of the Australian Newsprint Mills site at Albury-Wodonga, approximately one kilometre south-east of the current study area. McIntyre stated that emus, kangaroos, wallabies, and smaller marsupials would have been present in the area, as well as crayfish along Eight Mile Creek.

The survey targeted areas adjacent to higher order water courses, and areas of exposed ground. Lowest priority was assigned to steep slopes within the survey unit. It was noted that the groundcover hampered survey efforts; with exposures identified only in cattle tracks plough lines, and creek banks. The survey identified a total of five sites, including one scarred tree with a scar measuring 2.3 by 0.5 metres, and five areas of charcoal or carbonaceous soil. These areas were locations where the soil profiles contained a high concentration of carbon or charcoal, evident in exposed soil profiles. McIntyre (1977) noted that these areas may have been indicative of Aboriginal activity; however they did not constitute Aboriginal sites.

Haglund (1980) undertook a survey of a 90 kilometre by six metre wide easement as a part of the Hume Shire Villages Water Supply Scheme. The survey unit for the water easement extended along Gerogery Road, to the east of the study area. Background research undertaken by Haglund (1980) identified the two sites types most likely to occur within the study area as artefact scatters and modified trees. Quartz was also identified as the most common raw material in the local area.

The survey involved a mixture of vehicular reconnaissance and pedestrian survey. No sites were identified within the survey unit; however one scarred tree was identified adjacent to it. In addition to this, a number of areas of potential were identified. All areas of potential were identified in relation to crests or ridgelines.

3.2.2 Local context

Upcher and Smith (1992) completed an archaeological survey for Aboriginal sites at 'Maryvale', encompassing the area assessed by McIntyre (1977) and extending to the south along the eastern side of Gerogery Road in close proximity to the study area. The assessment included a review of previous survey which had taken place in the region, and identified that the predominant sites in the local area were open artefact sites and scarred trees, with recorded artefacts sites in the area dominated by quartz. Upcher and Smith (1992) stated that while burials, mounds, middens, quarries, and art sites were not located in the vicinity of Albury-Wodonga, they did have the potential to be identified in a broader regional context.

The survey identified a total of 26 archaeological sites, including 11 isolated finds, nine artefact scatters, five scarred trees, and one scarred tree and artefacts scatter complex. All artefacts recorded during the survey were comprised of quartz with the exception of one silcrete artefact. All artefact scatters recorded during the survey were identified within 50 metres of creek lines, and all but one was located along the creek banks. A similar pattern is evident in relation to isolated finds. Upcher and Smith (1992, p. 30) provided the following assessment of subsurface archaeological potential within the survey unit:

Sites along the main trunk of Nine Mile Creek occurred wherever erosion scars had cut into the creek banks at a depth of over 10 centimetres. Sites or isolated artefacts were found in every such erosion scar encountered along the main trunk of the creek. Given this it is highly likely that

further sites, existing as sub-surface deposits at a depth of 10 centimetres or greater, occur along this creek. Alternatively it is also possible that the sites so far recorded represent one continuous sub-surface scatter along this creek.

Given the commonality of artefact sites along the margins of Nine Mile Creek, it is likely that artefact sites and areas of potential archaeological deposits (PADs) will occur in similar context, that is, within 50 metres of major waterways, elsewhere in the local area.

Kelly and Price (2004) completed an archaeological survey of the former munitions area at Ettamogah, approximately 1,600 metres south of the current study area. The survey included background research and field survey. Kelly and Price (2004, p. 22) noted the following trends in archaeological deposits in the region from the background research conducted:

- the dominant stone tool material within the immediate Albury area is quartz
- Aboriginal objects and sites manifest consistently in close association with water sources, in particular peripheral creek systems
- lithic sites and isolated objects within the immediate Albury area are largely dominated bydebitage
- bothdebitage and formal tool type material within the immediate Albury area are consistently small artefacts resulting from light duty tool maintenance' type activities
- overall site sizes are small in comparison to the larger, heavy-duty activity sites that characterise the extensive resource areas of the Hume Basin east of the Albury area proper.

The survey did not identify any Aboriginal sites; however it did identify one area of potential on a raised level platform associated with a depression area (Kelly & Price, 2004, p. 26). No further information is available on the context of this PAD.

Kelly and Price (2004) noted that there has historically been a lack of co-ordinated investigations into Aboriginal archaeology in the Albury region, which has led to the archaeological record being interpreted as sparse, but that recent studies had challenged this view. In particular a 2004 survey of Woolshed and Eight Mile creeks was discussed by the authors, which led to this identification of 52 Aboriginal objects and one scarred tree. The dominant material type within this assemblage was quartz, and the vast majority of the finds were identified asdebitage. Based on the results of recent assessments conducted within the area, Kelly and Price (2004, p. 31) proposed a model of Aboriginal occupation for the Albury region which included:

- intensive occupation of high level resource zones associated with the nearby Hume Basin and major river systems
- high resource zone sites are characterised by large, dense and diverse lithic deposits containing a variety of stone materials and numbers of heavy duty formal tool types
- areas immediate to Albury contain smaller more transitory campsites containing quartz dominateddebitage scatters reflecting lighter duty tool-maintenance type activities
- immediate Albury area sites are associated with level landforms in proximity to smaller seasonal water sources.

AECOM (2016b) conducted an Aboriginal cultural heritage assessment for Kerr Road, Thurgoona. AECOM had previously conducted two archaeological surveys within the same area (AECOM, 2015; AECOM, 2016a). A single existing archaeological site was identified during these earlier investigations (AHIMS 60-3-0088), but was unable to be relocated at the time of survey. This was likely due to significant creek bank erosion. Their project area extended across Eight Mile and Woolshed Creeks

and was characterised by a single low-gradient, north-south trending spur. The majority of the project area fell within the Ettamogah soil landscape. Nine open artefact sites were identified within the project area. Four were existing artefact sites identified on valley flats. A further five artefact sites were identified across a similar landscape form (TH-AS1-16, TH-AS2-16 and TH-AS4-16) as well as a terrace plain (TH-IA1-16) and a simple slope landform (TH-IA2-16). As these sites were to be either partially or completely destroyed by proposed works, salvage was recommended.

Biosis (2016a) conducted a due diligence assessment of four areas up to two kilometres south east of the current study area for proposed creek crossings and a roundabout, water main and drainage works associated with the Nexus industrial estate. They predicted that there was high potential for flaked stone artefact scatters and isolated artefacts and moderate potential for modified trees and PADs to be located in their study area. No Aboriginal sites or objects were identified. However, one area within the southern portion of the current study area, on Eight Mile Creek, was identified as having the potential to contain Aboriginal objects.

Biosis (2016b) undertook a due diligence assessment for the majority of the Nexus industrial estate. Three artefact scatters were identified during the survey (Nexus AS1 to 3). All three scatters were located in the disturbed, graded area along the partially constructed Knowles Road North. The topsoil had been removed to a depth of between 15 and 30 centimetres by recent earthworks. The scatters consisted of quartz and crystal quartz flakes, tools and cores. The areas east of Nexus AS1 and south of Nexus AS2 and 3 had been graded down to sterile clay. However, the less disturbed areas north and south of Nexus AS1 and north of Nexus AS2 and 3 have the potential to contain additional subsurface archaeological deposits (PADs 1 to 3). The survey identified four additional areas of archaeological potential within the study area, associated with the margins of Eight Mile Creek and an unnamed watercourse in the northern part of the study area (PADs 4 to 7). These areas represented high points in the landscape overlooking Eight Mile Creek and unnamed watercourses in the study area and are also the subject of this investigation.

Biosis (2017) carried out test excavations within areas identified as PADs in Biosis (2016 a, b) ahead of the proposed Nexus industrial estate development. Five additional Aboriginal sites were identified as a result of these excavations (Nexus AS3 to 8). Of the 63 artefacts identified within the study area, 60 were located within the undulating foot slopes landform and only three from creek bank/terrace landforms. On the basis of artefact densities within the study area, small rises within the undulating foot slopes landform were considered to hold the greatest potential for sites. The artefacts identified were predominately quartz (n=53) or crystal quartz (n=9), excepting one basalt manuport identified as a whetstone. All sites were located in close proximity to a watercourse (Biosis, 2017).

Previous studies show that sites are most likely to be identified along watercourses in the Albury region. The frequency of artefact sites particularly appears to correlate with their proximity to ephemeral watercourses, and there is a high likelihood of identifying artefact sites within 250 metres of watercourses. In previous studies, modified trees exhibited a slight tendency to be located over 150 metres from watercourses, but this likely reflects the survival of modified trees in areas which were not subject to clearing, rather than preferences in selection by Aboriginal groups.

3.2.3 AHIMS site analysis

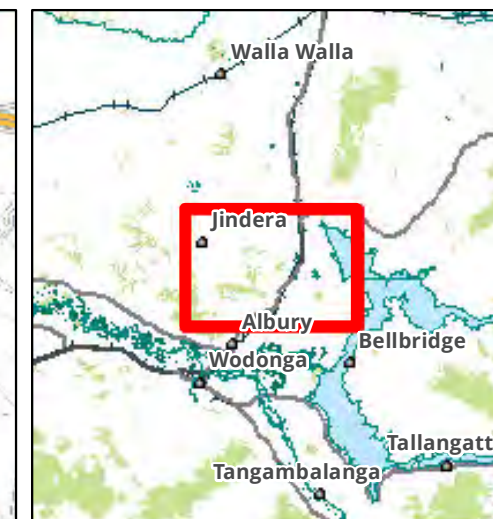
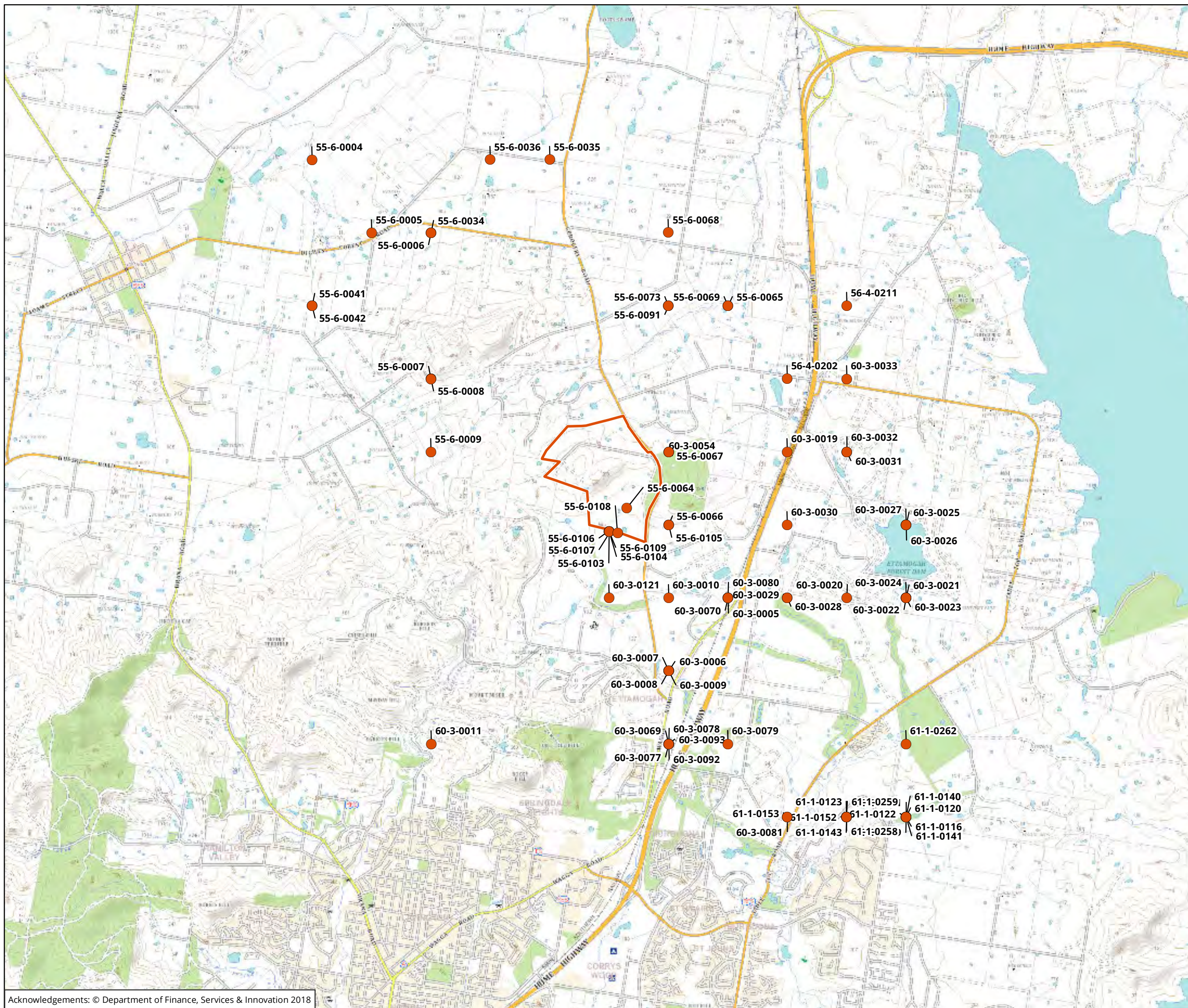
A search of the OEH Aboriginal Heritage Information Management System (AHIMS) database (Client Service ID: 361646) identified 76 Aboriginal archaeological sites within a 5 x 5 kilometre search area, centred on the proposed study area (Table 4). A further search (Client Service ID: 440700) No extant recorded sites are located *within* the study area (Figure 4). AHIMS search results are provided in Appendix 1. The mapping coordinates recorded for these sites were checked for consistency with their descriptions and location on maps from Aboriginal heritage reports where available. These descriptions and maps were relied where notable discrepancies occurred.

It should be noted that the AHIMS database reflects Aboriginal sites that have been officially recorded and included on the list. Large areas of NSW have not been subject to systematic, archaeological survey; hence AHIMS listings may reflect previous survey patterns and should not be considered a complete list of Aboriginal sites within a given area. Some recorded sites consist of more than one element, for example artefacts and a modified tree, however for the purposes of this breakdown and the predictive modelling, all individual site types will be studied and compared.

Table 4 AHIMS site type frequency

Site type	Number of occurrences	Frequency (%)
Artefact	51	67.10
Modified tree	23	30.26
PAD	1	1.32
Restricted site	1	1.32
Total	76	100.00

A simple analysis of the Aboriginal cultural heritage sites registered within the 5 x 5 kilometre buffer of the study area indicates that artefacts are the predominant Aboriginal site type located within the region (n=51, 67.10 percent). Modified trees comprise 30.26 percent (n=23) of all sites. There is also one potential archaeological deposit (PAD, n=1) located within the search area.

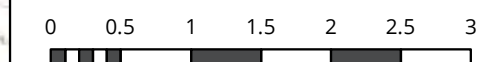


Legend

-  Study area
-  AHIMS Record

Figure 3 AHIMS records near the study area

NOT TO BE MADE PUBLIC



Kilometers
Scale: 1:54,000 @ A3
Coordinate System: GDA 1994 NSW Lambert



Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

Matter: 27381
Date: 12 March 2020,
Checked by: jturner, Generated by: jturner
Location: P:\27300s\27381\Mapping\27381_F3_AHIMS.mxd

3.3 Predictive model

A model has been formulated to broadly predict the type and character of Aboriginal cultural heritage sites likely to have existed throughout the study area and where they are more likely to be located.

This model is based on:

- site distribution in relation to landscape descriptions within the study area
- consideration of site type, raw material types and site densities likely to be present within the study area
- findings of the ethnohistorical research on the potential for material traces to present within the study area
- potential Aboriginal use of natural resources present or once present within the study area
- consideration of the temporal and spatial relationships of sites within the study area and surrounding region.

Based on this information, a predictive model has been developed, indicating the site types most likely to be encountered during the survey and subsequent sub-surface investigations across the present study area. The definitions of potential are described in Table 5. The results of this model will be influenced by previous survey patterns and the limited search area, which does not necessarily provide a representative sample of all site types, landforms, geological formations or soil landscapes. In

Table 6, The definition of each site type is described firstly, followed by the predicted likelihood of this site type occurring within the study area.

Table 5 Definitions of the predictive statements' potential ratings

Potential rating	Description
High	Those aboriginal sites types give this rating have been recorded in both the regional and local landscape. The landscape conditions within the focus area will be aligned with those generally associated with this site type. Although it may be unlikely to locate this site type, due to their overall moderated numbers, this location would be where you would ultimately find them.
Medium	Sites are known to occur in the regional and local landscape but not in high numbers. The landscape conditions are not precisely aligned however the site may infrequently occur in certain conditions.
Low	The site types given this rating have been recorded regionally. The site is generally considered unlikely to occur within the landform conditions present.

Table 6 Aboriginal site prediction statements

Site type	Site description	Potential
Flaked stone artefact scatters and isolated artefacts	Artefact scatter sites can range from high-density concentrations of flaked stone and ground stone artefacts to sparse, low-density 'background' scatters and isolated finds.	High: Stone artefact sites have been previously recorded in the region across a wide range of landforms including alluvial flats, and also within the study area; they have the high potential to be present in undisturbed areas within the study area.
Shell middens	Deposits of shells accumulated over either singular large resource gathering events or over longer periods of time.	Very Low: Shell midden sites have not been recorded within the study area. There is some potential for shell middens to be located in vicinity of permanent water sources. There is a low potential of Shell Middens being present within the study area.
Quarries	Raw stone material procurement sites.	Very Low: There is no record of any quarries being within or surrounding the study area.
Potential archaeological deposits (PADs)	Potential sub surface deposits of cultural material.	Moderate: PADs have been previously recorded in the region across a wide range of landforms including alluvial flats. They have the potential to be present in undisturbed landforms.
Modified trees	Trees with cultural modifications	Medium: A small number of mature native trees have survived within the study area, due to extensive vegetation clearing from the 1800's onwards.
Axe grinding grooves	Grooves created in stone platforms through ground stone tool manufacture.	Very Low: The geology of the Study Area lacks suitable horizontal sandstone rock outcrops for axe-grinding grooves. Therefore there is low potential for axe grinding grooves to occur in the study area.
Burials	Aboriginal burial sites.	Very Low: Aboriginal burial sites are generally situated within deep, soft sediments, caves or hollow trees. Areas of deep sandy deposits will have the potential for Aboriginal burials. The soil profiles associated with the study area are not commonly associated with burials.
Rock shelters with art and / or deposit	Rock shelter sites include rock overhangs, shelters or caves, and generally occur on, or next to, moderate to steeply sloping ground characterised by cliff lines and escarpments. These naturally formed features may contain rock art, stone artefacts or midden	Very Low: The sites will only occur where suitable sandstone exposures or overhangs possessing sufficient sheltered space exist, which are not present in the study area.

Site type	Site description	Potential
	deposits and may also be associated with grinding grooves.	
Aboriginal ceremony and Dreaming Sites	Such sites are often intangible places and features and are identified through oral histories, ethnohistoric data, or Aboriginal informants.	Low: There are currently no recorded mythological stories for the study area however they are known to occur in the region.
Post-contact sites	These are sites relating to the shared history of Aboriginal and non-Aboriginal people of an area and may include places such as missions, massacre sites, post-contact camp sites and buildings associated with post-contact Aboriginal use.	Low: There are no post-contact sites previously recorded in the study area and historical sources do not identify one.
Aboriginal places	Aboriginal places may not contain any 'archaeological' indicators of a site, but are nonetheless important to Aboriginal people. They may be places of cultural, spiritual or historic significance. Often they are places tied to community history and may include natural features (such as swimming and fishing holes), places where Aboriginal political events commenced or particular buildings.	Low: There are currently no recorded Aboriginal historical associations for the study area.

4 Archaeological survey

A field survey of the study area was undertaken on the 18th and 19th of September 2018 with a field team of seven members including William Truscott, Meaghan Aitchison and Tom Crowe (Biosis), Raymond Kennedy, Uncle Ken (Tunny) Murray, Sam Kirby and Yalmambirra (RAPs). A further field survey was conducted across the southern portion of the study area and immediate surrounds on 26 February 2020 in order to ground truth the results of the previous survey with a team of six team members including Meaghan Aitchison and Christine Morgan (Biosis), Rob Clegg, Stephen Clegg and Peter Clegg (Wiradjuri Council of Elders) and Yalmambirra. The field survey sampling strategy, methodology and a discussion of results are provided below.

A previous assessment by Edwards and Morris (2017) identified one intangible cultural heritage place, within the current study area, however this site was not registered on AHIMS due to a lack of information regarding its use as a ceremonial site. This area was included in current archaeological survey in order to confirm the findings of previous investigations.

4.1 Archaeological survey objectives

The objectives of the survey were to:

- provide Registered Aboriginal Parties (RAPs) an opportunity to view the study area and to discuss previously identified Aboriginal object(s) and/or place(s) in or within close proximity to the study area
- undertake a systematic survey of the study area targeting areas with the potential for Aboriginal heritage
- identify and record Aboriginal archaeological sites visible on the ground surface
- identify and record areas of potential archaeological deposits (PADs).

4.2 Archaeological survey methodology

The survey methods were intended to assess and understand the landforms and to determine whether any archaeological material from Aboriginal occupation or land use exists within the study area

4.2.1 Sampling strategy

The survey effort targeted those portions of the study area that have not been impacted by the existing granite quarry as the quarry has removed all trace of the ground surface. As shown in Figure 5, the study area was divided into three survey units comprising two landforms;

- **SU1** – undulating footslopes and with hillslopes along western extent, currently utilised as grazing land
- **SU2** – low hills and hillslopes, current quarry works located in the western and north-east portions of survey unit
- **SU3** – undulating footslopes, largely rural residential property currently used for cattle grazing

4.2.2 Survey methods

The archaeological survey was conducted on foot with a field team of six members. Recording during the survey followed the archaeological survey requirements of the code and industry best practice methodology. Information that recorded during the survey included:

- Aboriginal objects or sites present in the study area during the survey
- survey coverage
- any resources that may have potentially have been exploited by Aboriginal people
- landform
- photographs of the site indicating landform
- evidence of disturbance
- Aboriginal artefacts, culturally modified trees or any other Aboriginal sites.

Where possible, identification of natural soil deposits within the study area was undertaken. Photographs and recording techniques were incorporated into the survey including representative photographs of survey units, landform, vegetation coverage, ground surface visibility (GSV) and the recording of soil information for each survey unit were possible. Any potential Aboriginal objects observed during the survey were documented and photographed. The location of Aboriginal cultural heritage and points marking the boundary of the landform elements were recorded using a hand-held Global Positioning System (GPS) and the Map Grid of Australia (MGA) (94) coordinate system.

4.3 Archaeological survey results

Transects were walked across 3 survey units (SU1, SU2 and SU3) comprising two landforms with the 7 surveyors walking two metres apart (Figure 5). This follows the methodology set out in Burke and Smith (2004: 65) which states that a single person can only effectively visually survey an area of two linear metres.

No Aboriginal sites were identified in the project area.

No evidence of the scarred tree, mungabarina-mm1 (AHIMS site 55-6-0064) identified within the study area during the desktop assessment was located during the archaeological survey. It is likely that the site no longer exists. An Aboriginal Site Impact Recording Form (ASIRF) was submitted to AHIMS and approved on 22 July 2019 and the status of mungabarina-mm1 (AHIMS site 55-6-0064) was updated as having been destroyed.

Two areas of potential archaeological deposit were identified within the project area.

- **PAD 1** - identified on a level footslope at the base of a low rise in Survey Unit 1 (SU1) immediately adjacent an ephemeral waterway to the west and what appeared to be a naturally occurring drainage line to the east.
- **PAD 2** - identified on a hill crest within SU2 overlooking the entire of the study area. Aboriginal representatives involved in the field survey indicated that the position of this PAD in the landscape would have provided and advantageous view point. The large granite outcrops across the hillcrest would also have provided some shelter from the elements.

The location of each PAD is shown in Figure 5 with further discussion provide in Section 4.8. The results from the field survey have been summarised in Table 7 and Table 8 below.

Table 7 Survey coverage

Survey Unit	Landforms	Survey unit area (m ²)	Visibility (%)	Exposure (%)	Effective coverage area (m ²)	Effective coverage (%)
1	Footslope/Hillslope	447000	10	5	447000	90
2	Footslope, Low Hill/Hillslope	936500	40-60	20	40800	44
3	Footslope	474300	30	5	4734300	100

Table 8 Landform summary

Landform	Landform area (m ²)	Area effectively surveyed (m ²)	Landform effectively surveyed (%)	No. of Aboriginal sites	No. of artefacts or features
Low Hill/Hillslope	936500	40800	44	0	0
Footslope	921300	921300	95	0	0

4.4 Constraints to the survey

With any archaeological survey there are several factors that influence the effectiveness (the likelihood of finding sites) of the survey. The factor that contributed most to the effectiveness of the survey within the study area was the dense grass cover across most of the study area and narrow survey transects in some areas due to uneven ground or rocky hill slopes. Survey coverage and results are discussed below.

4.5 Visibility

In most archaeological reports and guidelines visibility refers to ground surface visibility, and is usually a percentage estimate of the ground surface that is visible and allowing for the detection of (usually stone) artefacts that may be present on the ground surface (National Parks and Wildlife Services, 1997). Visibility throughout most of the study area was low, averaging 5%. In survey unit 1, ground surface visibility was affected by a heavy concentration of paper pulp which was strewn across the area (Plate 4). In areas of exposure that had been disturbed by stock movement, erosion, quarry operations and vehicle access tracks was excellent, averaging 80% but up to 100% in some

areas (see Plate 4 and Plate 5). The vast majority of the surveyed area had no visibility as it was densely vegetated with grass. Visibility in survey unit 2 was very poor.



Plate 4 **No visibility due to paper pulp SU1 (M.Aitchison 18/09/2018)**



**Plate 5 Visibility along vehicle access track, SU2 facing north-west (M.Aitchison
18/09/2018)**

4.6 Exposure

Exposure refers to the geomorphic conditions of the local landform being surveyed, and attempts to describe the relationship between those conditions and the likelihood the prevailing conditions provide for the exposure of (buried) archaeological materials. Whilst also usually expressed as a percentage estimate, exposure is different to visibility in that it is in part a summation of geomorphic processes, rather than a simple observation of the ground surface (National Parks and Wildlife Services, 1997; Burke & Smith, 2004, p. 79). Overall, the study area displayed areas of exposure along access tracks, dam banks and around the existing quarry pit (80 – 100%). No exposures were evident in other portions of the study area (see Plate 6, Plate 7).



Plate 6 **Area of exposure along dam bank SU1 (M.Aitchison 18/09/2018)**

4.7 Disturbances

Disturbance in the study area is associated with natural and human agents. Natural agents generally affect small areas and include the burrowing and scratching in soil by animals, such as Wombats, Foxes, Rabbits and Wallabies, and sometimes exposure from slumping or scouring. Disturbances associated with recent human action are prevalent in the study area and cover large sections of the land surface. The agents include the partial construction of roads; farming practices (such as initial vegetation clearance for creation of paddocks), the installation of fencing and stock troughs, stock grazing and the creation of artificial dams (Plate 7).



**Plate 7 Area of disturbance surrounding stock yards northern extent SU2
(M.Aitchison 19/08/2018)**

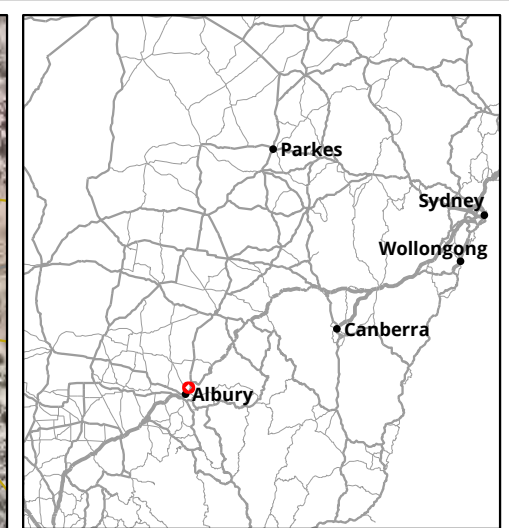
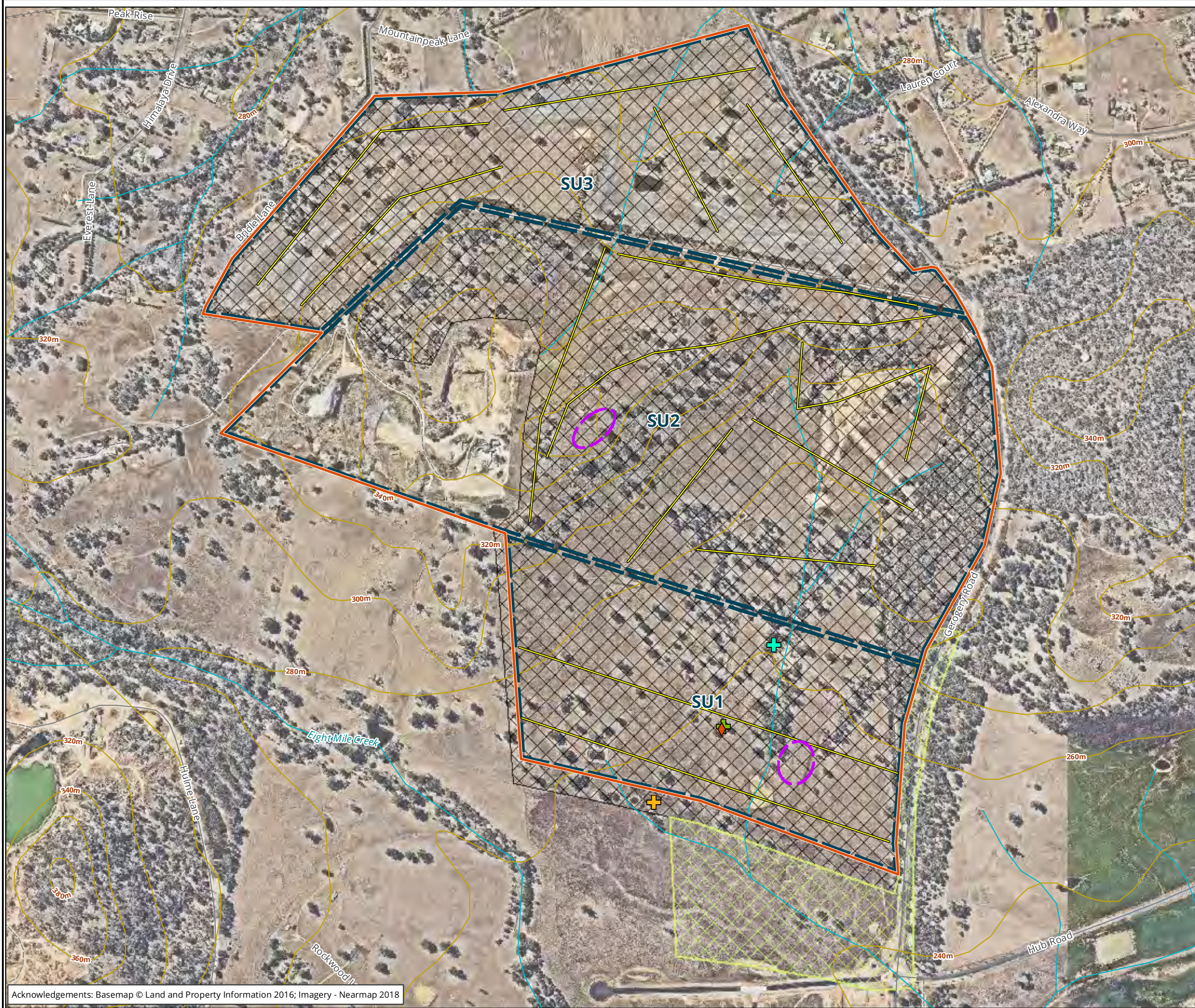
While the working quarry is currently located within the western portion of SU2, other portions of the landscape within the study area had been subject to ground disturbances associated with mining practices (Plate 8). These disturbances included the creation of vehicle tracks and roadways, and the quarrying, grading and stockpiling of earth (Plate 9). As on Figure 5, these activities can be seen on aerial imagery, within north-eastern portion of SU2, immediately adjacent Gerogery Road. The area that is currently being quarried was not surveyed.



Plate 8 SU2 overlooking quarry, facing south-west (M.Aitchison 18/09/2018)



Plate 9 Stockpiled earth in north-eastern portion of SU2 (M.Aitchison 18/09/2018)



Legend

- Study area
- SurveyUnits
- Potential Archaeological Deposit
- Transect
- Modified tree
- AHIMS 55-6-0064 (AGD 55 projection)
- AHIMS 55-6-0064 (GDA 55 projection)
- AHIMS 55-6-0064 - Original sitecard recording (AMG 55 projection)

Survey coverage

- Initial
- Additional

Figure 5 Survey Coverage

0 100 200 300 400
Metres
Scale: 1:8,000 @ A3
Coordinate System: GDA 1994 NSW Lambert

biosis
Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

Matter: 27381,
Date: 12 March 2020,
Checked by: AE, Drawn by: DK, Last edited by: jturner
Location: P:\27300s\27381\Mapping\27381_F5_SurveyCoverage.mxd

4.8 Archaeological survey results

For ease of documentation and In order to effectively record all landforms, the study area was divided into three survey units (Figure 5, Table 7 and Table 8).

SU1 was located within the southern portion of the study area and consisted of undulating footslopes currently utilised as grazing land.

Generally the survey was hampered by poor ground surface visibility due to grass cover and in SU1, the presence of paper pulp from the adjacent paper mill. However, areas of disturbance in the study area indicated that the soil profile is largely very shallow and rocky and of very low archaeological potential.



Plate 10 PAD 1 footslope adjacent drainage line facing west (M.Aitchison 18/09/2018)

PAD 1 was identified on a level footslope at the base of a low rise in SU1 immediately adjacent an ephemeral waterway to the west and what appeared to be a naturally occurring drainage line to the east (Plate 10). This landform, while largely cleared of natural vegetation and currently utilised as pasture for livestock such as sheep, did not appear to have been subject to any significant ground disturbance due to agricultural practices such as deep ripping.



Plate 11 PAD 2 hill crest facing east (M.Aitchison 19/09/2018)

PAD 2 comprises approximately 6,800 square metres of ground on the top of hill in the central portion of SU2, immediately east of the current main quarry location. The area contains some eucalypts and granite outcrops, boulders and tors. The ground is covered by grasses. The area provides views of the surrounding landscape (Plate 11). The RAPs indicated during the site survey that while this may not have been favoured as a camp site for Aboriginal people, this position in the landscape would have offered an advantageous view of the surrounding area and that granite outcrops and boulders would have offered some shelter from the elements. As such the area may have served as a look out or meeting place.

4.9 Additional survey results

The additional survey, conducted on 26 February 2020, focused specifically on locating or confirming the destruction of the previously registered scarred tree known as Mungabarina-mm1 (AHIMS 55-6-0064). Every mature tree within the southern portion of the study area and adjacent road reserves was carefully inspected for signs of cultural modification (Figure 5).

Mungabarina-mm1 (AHIMS 55-6-0064) was not able to be located at any of the co-ordinate projections provided by AHIMS. A number of trees were noted within the study area to have fallen, died or have been impacted by fire. Several had been subject to dismemberment by chainsaw following their collapse (see example Plate 12



**Plate 12 Cut and fallen dead tree within southern extent of study area, facing south
(M.Aitchison 26/02/2020)**

One tree within the southern portion of the study area was identified by Traditional Owner representatives present on site as exhibiting cultural modification. The tree exhibited a south facing shield-shaped elongated scar of approximately 85 centimetres length and 40 centimetres width. There was some evidence of regrowth of between 10 and 35 centimetres. Yalmambirra suggested that this tree was in fact Mungabarina-mm1 (AHIMS 55-6-0064), which had been incorrectly mapped and he and the Traditional Owner representatives present requested the site card for the tree be updated and its status changed from destroyed to extant.



Plate 13 Scarred tree thought to be mungabareena-mm1 (AHIMS 55-6-0064) facing north (M.Aitchison 26/02/2020)

4.10 Discussion of results

Overall, the results of the assessment were largely consistent with the predictive model and the results of previous surveys in the region which predicted that sites/object are more likely to be found in association with watercourses. Watercourses in the area, such as Eight Mile Creek to the south contain clearer evidence of Aboriginal occupation with a large volume of quartz artefacts identified and later subject to salvage during an industrial subdivision on the level footslope immediately south of SU1 (Biosis, 2016a; Biosis, 2016b; Biosis, 2017).

During the initial field survey no evidence of the scarred tree (AHIMS 55-6-0064) identified during the initial AHIMS search (Client Service ID: 361646) was present within or immediately adjacent the study area. This may have been due to discrepancies in mapping of the scarred tree (AHIMS 55-6-0064). It was thought that the scarred tree (AHIMS 55-6-0064) which may be physically located some distance outside the current study area. It was determined following the initial survey, however, that it was likely that the tree was subject to destruction and no longer extant. Aboriginal representatives' onsite could provide no further information regarding the scarred tree and that the tree was not located within the immediate vicinity of the coordinates provided during the initial AHIMS search.

Further discussions via telephone in June and August of 2019, confirmed that no culturally modified tree was observed within or immediately adjacent the southern boundary of the study area. An Aboriginal Site Impact Recording Form (ASIRF) was submitted to AHIMS and approved on 22 July 2019, altering the status of mungabarina-mm1 (AHIMS site 55-6-0064) from an existing Aboriginal site to having been destroyed.

The additional survey to ground truth the presence or absence of AHIMS 55-6-0064 conducted on 25 February 2020 included the inspection of every mature and fallen tree within the southern portion of the study area and immediate surrounds (Figure 5). While the additional survey confirmed that there was no evidence mungabareena-mm1 (AHIMS site 55-6-0064) at those coordinates provided on either the original site card or previously conducted AHIMS searches, a scarred tree was identified some distance from the AMG coordinates provided on the original AHIMS site card from 2007 (Figure 5 and Plate 13). Following extensive discussion with the RAPs present during the additional survey, it was suggested that this newly identified tree may in fact be mungabareena-mm1 (AHIMS site 55-6-0064) which had previously believed to have been destroyed. A site update was submitted to AHIMS following the survey, an official determination that this is mungabareena-mm1 (AHIMS 55-6-0064) was yet to be confirmed at the time of writing. RAPs, however, concluded that it must be the same site.

There are two watercourses within the study area. An ephemeral creek and drainage line within SU1 and a shallow gully within SU2 which drains to the north-east. The gully in SU2 has been highly disturbed by quarrying activity, however it is overlooked from the north-west by a hillcrest and ridgeline (PAD 2). Given the natural features and proximity of the study area to known Aboriginal sites, it may represent a look out, meeting place or transient camp site. This is consistent with the information provided by the RAPs.

5 Test excavation

Following the results of the field survey a test excavation program was undertaken on 20 September 2018 by William Truscott, Meaghan Aitchison and Tom Crowe (Biosis) with Yalmambirra, Raymond Kennedy and Jarrod Kennedy (RAPS) to characterise the extent, nature and archaeological (scientific) value of Aboriginal cultural heritage within identified Aboriginal sites and areas of PAD. The sampling strategy, methodology and results of the test excavation program are discussed below.

5.1 Test excavation objectives

The objectives of the sub-surface investigation are to characterise the extent, nature and archaeological (scientific) value of cultural heritage within the following areas:

- PAD 1
- PAD 2

5.2 Test excavation methodology

Test excavations were conducted in accordance with Requirement 16a of the code.

5.3 Test excavation results

A total of ten 50 x 50 centimetre test pits were excavated within 2 PADs (see Plates 12 to 16 and Figure 6). Individual test pit and soil analysis results are provided in Appendix 2. Results by PADs are shown in Table 9. A detailed discussion of results is provided below.

Table 9 Test excavation results by PAD

PAD	Landform	PAD area (m ²)	Area tested (m ²)	PAD effectively tested (%)	No. of sites	No. of artefacts
1	Footslope			100	NIL	NIL
2	Ridgeline/hillcrest			100	NIL	NIL

5.3.1 PAD 1

A total of 5 test pits were excavated at PAD 1 at 20 metre intervals in order to determine the across a broad area (Figure 6). No artefacts were identified in the test pits (Plate 14 and Plate 15).



Plate 14 Test Pit 3 PAD1 (M. Aitchison 20/09/2018)



Plate 15 Test Pit 4 PAD 1 (M. Aitchison 20/09/2018)

The soil profile across PAD1 was generally shallow with test pits terminating at a compacted clay layer at depths of between 130 and 220 millimetres. The soil stratigraphy consisted of clayey silt over sandy silt with small degrading quartz inclusions (< 10 millimetres).

5.3.2 PAD2

A total of 5 test pits were excavated at PAD 2 at 20 metre intervals (Figure 6). No artefacts were identified in the test pits excavated at PAD 2 (Plate 16 and Plate 17).



Plate 16 Test Pit 2 PAD 2 (M. Aitchison 20/09/2018)



Plate 17 Test Pit 3 PAD 2 M.Aitchison 20/09/2018)

The soil profile across PAD 2 was generally shallow. Soil stratigraphy consisted of silt (Plate 16) over clayey silt containing small degrading granite and quartz pebbles (5 - 10 millimetres). All test pits terminated at a firm sandy clay base at depths of between 120 and 400 millimetres (Plate 17).

6 Analysis and discussion

6.1 Archaeological analysis

No new Aboriginal sites were identified within the study area.

A generally consistent soil profile of silt, sandy silt and clayey silt was identified across both PAD 1 and PAD 2. Variations in stratigraphic depth across PAD 2 can be attributed to natural erosive processes and the location of PAD 2 on a sloping ridgeline overlooking the study area (Plate 18). A similar explanation may be given for any stratigraphic variation across PAD 1, which is located between two ephemeral drainage lines.



Plate 18 PAD 2 on sloping ridgeline, looking north (M.Aitchison 20/09/2018)

6.2 Discussion of results

The location of PAD 2 on the ridgeline of a low hill overlooks the landscape for a number of kilometres to the north, south, east and west. This position in the landscape would likely have provided Aboriginal people with an advantageous outlook over the local area. There is however, no oral history or historic records which indicate that this particular place within the landscape was utilised for any specific purpose by Aboriginal peoples. AHIMS site 55-6-0064 mungabareena- mm1, could not be relocated during the field survey and following consultation with the RAPs, a site impact form was submitted stating the site has likely been destroyed. Past land use practices such as vegetation clearance, agriculture, the installation of dams and fences and grazing within the study area have also likely contributed to erosive processes which may have disturbed or destroyed any evidence of occupation by Aboriginal people within the study area.

An additional survey, conducted on 26 February 2020 identified a mature tree which exhibited scarring which is likely the result of cultural modification by Aboriginal people/s. Traditional Owner representatives present during the additional survey indicated that they felt this tree was Mungabarina-mm1 (AHIMS 55-6-0064), which had likely been incorrectly mapped. A further site update was submitted following the additional survey was submitted to AHIMS and at the time of writing was yet to be accepted.

The results of the archaeological investigation are consistent with other studies within the region which indicate that Aboriginal sites are largely identified within close proximity (100 m) to permanent sources of fresh water (Haglund, 1980; Kelly & Price, 2004). While a significant number of artefacts have been previously identified immediately adjacent the southern boundary of the current study area (Biosis, 2017), no Aboriginal artefacts were identified within any of the ten test pits excavated across PAD 1 and PAD 2. Those previously identified artefacts within the immediate vicinity of the current study area have been largely located on lower footslopes, on flat land adjacent Eight Mile Creek to the south, which would have provided a permanent source of fresh water. As such, it is likely that Aboriginal peoples within the region established their campsites on the flatter areas at the base of the hillslopes along this higher order waterway to the south of the study area rather than within the study area itself.



Legend

- Study area
- Potential archaeological deposit
- ▼ Test pit
- ◆ Modified Tree - AHIMS 55-6-0064

Figure 6 Test Excavation results

0 100 200 300 400

Metres
Scale: 1:7,000 @ A3
Coordinate System: GDA 1994 NSW Lambert



Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

Matter: 27381,
Date: 11 March 2020,
Checked by: AE, Drawn by: DK, Last edited by: jturner
Location: \\bio-data-01\matters\27300s\27381\Mapping\27381_F6_Results.mxd

7 Scientific values and significance assessment

The two main values addressed when assessing the significance of Aboriginal sites are cultural values to the Aboriginal community and archaeological (scientific) values. This report will assess scientific values while the ACHAR will detail the cultural values of Aboriginal sites in the study area.

7.1 Introduction to the assessment process

Heritage assessment criteria in NSW fall broadly within the significance values outlined in the Australia International Council on Monuments and Sites (ICOMOS) Burra Charter (Australia ICOMOS 1999). This approach to heritage has been adopted by cultural heritage managers and government agencies as the set of guidelines for best practice heritage management in Australia. These values are provided as background and include:

- **Historical significance** (evolution and association) refers to historic values and encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.
- **Aesthetic significance** (Scenic/architectural qualities, creative accomplishment) refers to the sensory, scenic, architectural and creative aspects of the place. It is often closely linked with social values and may include consideration of form, scale, colour, texture, and material of the fabric or landscape, and the smell and sounds associated with the place and its use.
- **Social significance** (contemporary community esteem) refers to the spiritual, traditional, historical or contemporary associations and attachment that the place or area has for the present-day community. Places of social significance have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods or events. Communities can experience a sense of loss should a place of social significance be damaged or destroyed. These aspects of heritage significance can only be determined through consultative processes with local communities.
- **Scientific significance** (Archaeological, industrial, educational, research potential and scientific significance values) refers to the importance of a landscape, area, place or object because of its archaeological and/or other technical aspects. Assessment of scientific value is often based on the likely research potential of the area, place or object and will consider the importance of the data involved, its rarity, quality or representativeness, and the degree to which it may contribute further substantial information.

The cultural and archaeological significance of Aboriginal and historic sites and places is assessed on the basis of the significance values outlined above. As well as the ICOMOS Burra Charter significance values guidelines, various government agencies have developed formal criteria and guidelines that have application when assessing the significance of heritage places within NSW. Of primary interest are guidelines prepared by the Commonwealth Department of the Environment and Energy, OEHS and the Heritage Branch, NSW Department of Planning and Environment. The relevant sections of these guidelines are presented below.

These guidelines state that an area may contain evidence and associations which demonstrate one or any combination of the ICOMOS Burra Charter significance values outlined above in reference to Aboriginal heritage. Reference to each of the values should be made when evaluating archaeological and cultural significance for Aboriginal sites and places.

In addition to the previously outlined heritage values, the OEH Guidelines (Department of Environment, Climate Change and Water, 2009) also specify the importance of considering cultural landscapes when determining and assessing Aboriginal heritage values. The principle behind a cultural landscape is that 'the significance of individual features is derived from their inter-relatedness within the cultural landscape'. This means that sites or places cannot be 'assessed in isolation' but must be considered as parts of the wider cultural landscape. Hence the site or place will possibly have values derived from its association with other sites and places. By investigating the associations between sites, places, and (for example) natural resources in the cultural landscape the stories behind the features can be told. The context of the cultural landscape can unlock 'better understanding of the cultural meaning and importance' of sites and places.

Although other values may be considered – such as educational or tourism values – the two principal values that are likely to be addressed in a consideration of Aboriginal sites and places are the cultural/social significance to Aboriginal people and their archaeological or scientific significance to archaeologists. The determinations of archaeological and cultural significance for sites and places should then be expressed as statements of significance that preface a concise discussion of the contributing factors to Aboriginal cultural heritage significance.

7.2 Archaeological (scientific significance) values

One Aboriginal site (a culturally modified tree, AHIMS 55-6-0064 mungabareena-mm1) could not be relocated within or immediately adjacent the study area during the initial ground survey. The site was thought to have been destroyed. A site impact form was submitted and accepted on 4 July 2019 and recommendations made assuming there were no extant tangible Aboriginal sites/objects with archaeological (scientific significance) value in the study area.

A further survey determined that there is one Aboriginal site located within the southern portion of the study area. This tree is likely mungabarina-mm1 (AHIMS 55-6-0064) which may have been incorrectly mapped on AHIMS.

7.2.1 Scientific (archaeological) significance

The modified (scarred) tree most likely represents the opportunistic use of the landscape in close proximity to a water source but any further observations are restricted due to the clearing of the area. The isolated nature of the tree in remnant vegetation and the fact that the adjacent landscape has been cleared means that as a representative example of this site type has high value. The tree is alive and healthy which enhances the viability of its medium term survival, therefore its integrity is also high.

Overall, however, the research potential of the site identified during this assessment is considered to be low. While the presence of the site can be used to assist in the development of site modelling for the local landscape, its scientific value for further research is limited.

7.2.2 Aesthetic significance

There are no aesthetic values associated with the archaeological site per se, apart from the presence of a scarred tree in the landscape. The modified and heavily disturbed landscape within the quarry development area however detracts from this aesthetic setting.

7.2.3 Social significance

While the true cultural and social value of Aboriginal sites can only be determined by local Aboriginal peoples, as a general concept, all sites hold cultural value to the local Aboriginal community. An opportunity to identify cultural and social value was provided to the Aboriginal representatives for this proposal through the fieldwork and draft reporting process.

Feedback provided by Yalmambirra during on site and phone conversations about the cultural value of the modified tree site mungabareena-mm1 (AHIMS 55-6-0064) indicated that ALL Aboriginal sites hold cultural value to the Aboriginal community. As such it was made clear that the site is important and a particular site type that should be avoided by development.

7.2.4 Other values

There are no other known heritage values associated with the study area. The area may have some educational value (not related to archaeological research) through educational material provided to the public about the Aboriginal occupation and use of the area, although the modified tree is within private property and there is little for the public to see.

8 Impact assessment

As previously outlined, the Project involves a continuation of an existing extractive industry (Rockwood Quarry), which is currently operating on the subject land. The proposed development involves a continuation of an existing extractive industry (Rockwood Quarry), which is currently operating on the subject land, as well as the use of this land to dispose of up to 10,000 tonnes of bio solid waste and the crushing of recycled concrete. More specifically, the proponent seeks approval for the continuation of existing extractive industry operations on-site for a period of 30 years, as well as an increase in the annual production of crushed rock from 75,000 cubic metres to 100,000 cubic metres per annum. The quarrying operations onsite are and will continue to be limited to the existing Pit 1 area and an area of 450 metres x 300 metres generally located within the middle of the site surrounding Pit 3. The proposal also includes road embankment works alongside Gerogery Road and the use of an unsealed Crown travelling Stock Reserve to access Pit 1.

The project includes the significant disturbance of ground of topsoil and the removal of bedrock by blasting and heavy machinery. There is one tangible Aboriginal site *within* the study area, mungabareena-mm1 (AHIMS 55-6-0064). At the time of writing, works were not planned to be undertaken within the immediate vicinity of mungabareena-mm1 (AHIMS 55-6-0064). Avoiding harm to the Aboriginal site is technically possible through avoidance.

If the recommendation to avoid this Aboriginal site for all future works is followed, there are no predicted physical impacts to Aboriginal cultural heritage.

9 Recommendations

Strategies have been developed based on the archaeological (significance) of cultural heritage relevant to the study area and influenced by:

- predicted impacts to Aboriginal cultural heritage
- the planning approvals framework
- current best conservation practise, widely considered to include:
 - ethos of the Australia ICOMOS Burra Charter
 - the code.

Prior to any impacts occurring within the study area, the following is recommended:

Recommendation 1: Protection of mungabareena-mm1 (AHIMS 55-6-0064)

Works *must* avoid the Aboriginal site identified as mungabareena-mm1 (AHIMS 55-6-0064) as per the current design plans detailed in this report. A *minimum* 10 metre buffer around the tree should be in place to protect the tree root zone. This buffer should be clearly defined through the installation of fencing around the tree.

Recommendation 2: No further assessment is required

No further archaeological investigation or works are required to be undertaken for the study area. Should the proposed works extend beyond the current design plans, further archaeological assessment will be required. This would include consultation with RAPs and may include further archaeological survey.

In the event that unexpected find, including human remains, are unearthed during any phase of the project please refer to Recommendations 2 and 3 below.

Recommendation 3: Stop work provision for any potential heritage sites identified during the project

All Aboriginal places and objects are protected under the NPW Act. This protection extends to Aboriginal objects and places that have not been identified but might be unearthed during construction.

If construction proceeds without an approved AHIP, work must cease if Aboriginal objects or places are identified. If an Aboriginal object is discovered and/or harmed in, or under the land, while undertaking development activities, the proponent must:

- Immediately cease work at the location
- Secure the area to ensure no further harm to the Aboriginal object
- Notify OEH as soon as practical on 131555, providing details of the Aboriginal object and its location
- Not recommence works without authorised in writing by OEH

Historical archaeological sites are protected under the relics provisions (s139 – 146) of the NSW *Heritage Act 1977*. Should any historical archaeological sites be identified during any phase of the proposed development, all works must cease in the vicinity of the find and the project archaeologist and A. P. Delaney & Co. Pty Ltd notified. Should the archaeological nature of the find be confirmed the Heritage Branch of the NSW Department of Planning, will require notification.

Recommendation 4: Stop work provision for any potential discovery of human remains

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the activity area must follow these steps:

3. **Discovery:** If suspected human remains are discovered all activity in the vicinity must stop IMMEDIATELY to ensure minimal damage is caused to the remains; and the remains must be left in place, the area secured to prevent unauthorised access and the remains protected from harm or damage.
4. **Notification:** Once suspected human skeletal remains have been found, the NSW Police and Coroner's Office must be notified immediately. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and OEH NSW. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW will be notified of the find under s.146 of the *Heritage Act 1977*.

Recommendation 5: Continued consultation with the registered Aboriginal stakeholders

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010), it is recommended that the proponent provides a copy of this draft report to the Aboriginal stakeholders and considers all comments received. The proponent should continue to inform these groups about the management of Aboriginal cultural heritage within the Study Area throughout the life of the project.

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Appendices

Appendix 1 AHIMS results

THE FOLLOWING APPENDIX IS NOT TO BE MADE PUBLIC

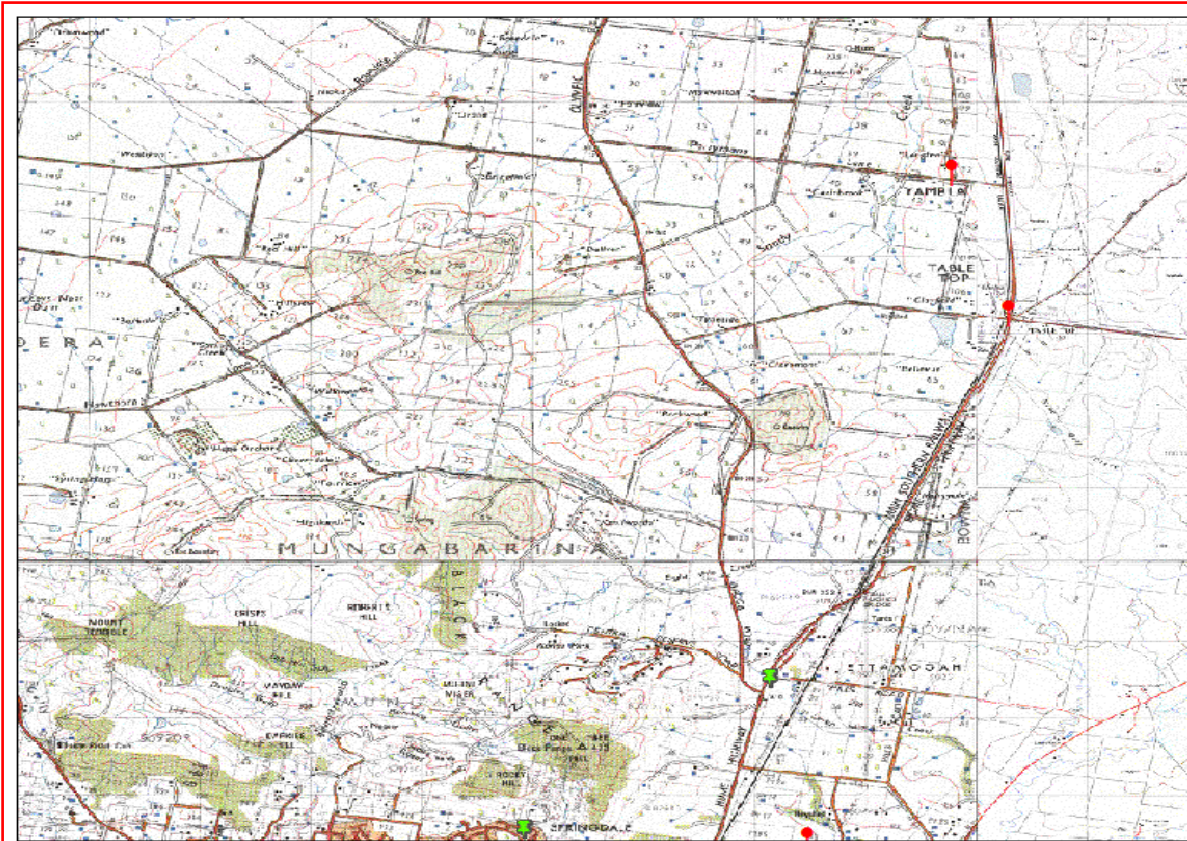
Biosis Pty Ltd - Albury
593a Macauley Street
Albury New South Wales 2640
Attention: Ashley Edwards
Email: aedwards@biosis.com.au

Date: 02 August 2018

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 55, Eastings : 491777 - 501805, Northings : 6012594 - 6023271 with a Buffer of 0 meters. Additional Info : ACHAR, conducted by Ashley Edwards on 02 August 2018.

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:

76	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 \(http://www.nsw.gov.au/gazette\)](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.

Note: This Excel report shows the sites found in AHIMS on the 02/08/2018. If this date is not the same as the original date of the Search Results letter obtained during the Basic Search, then the search results might be different. The PDF version of this report will always coincide with the Basic Search Results letter.

Site ID	Site name	Datum	Zone	Easting	Northing	Context	Site status	Primary contact	Site features	Site types	Recorders	Reports	Permits	Longitude GDA94	Latitude GDA94
60-3-0030	M11	AGD	55	499810	6017000	Open site Valid			Modified Tree (Carved Scarred Tree		Laura-Jane Smith	2350		147.00	-35.99
60-3-0054	Nine Mile Hill;Crown L	AGD	55	498300	6017700	Open site Valid			Modified Tree (Carved Scarred Tree		Mr.Michael Mulvaney			146.98	-35.98
55-6-0041	ABP/NSW 5	AGD	55	492840	6020080	Open site Valid			Artefact : 4		Joanne Bell			146.92	-35.96
55-6-0042	ABP/NSW 6	AGD	55	492800	6020120	Open site Valid			Artefact : 1		Joanne Bell			146.92	-35.96
55-6-0066	mod tree 3	AGD	55	497824	6016639	Open site Deleted		T Russell	Modified Tree (Carved or Scarred) : 1		Mr.Graham Moore			146.98	-35.99
55-6-0067	mod tree 4	AGD	55	498375	6018203	Open site Valid		T Russell	Modified Tree (Carved or Scarred) : -		Mr.Graham Moore			146.98	-35.98
55-6-0068	mod tree 5	AGD	55	498375	6021408	Open site Valid		T Russell	Modified Tree (Carved or Scarred) : 1		Mr.Graham Moore			146.98	-35.95
55-6-0069	mod tree 6	AGD	55	499176	6020291	Open site Valid		T Russell	Modified Tree (Carved or Scarred) : 1		Mr.Graham Moore			146.99	-35.96
56-4-0202	mod tree 7	AGD	55	500317	6019619	Open site Valid			Modified Tree (Carved or Scarred) : 1		Mr.Graham Moore			147.00	-35.97
55-6-0064	mungabarina-mm1	AGD	55	497451	6017233	Open site Valid		Sarah Colley	Modified Tree (Carved or Scarred) : 1		Mr.Michael Mulvaney			146.97	-35.99
55-6-0065	MUNGABARINA-MM3	AGD	55	499181	6020291	Open site Valid		Sarah Colley	Modified Tree (Carved or Scarred) : 1		Mr.Stephen Mark Free			146.99	-35.96
56-4-0211	TT 1 (Table Top Creek	AGD	55	500378	6020656	Open site Valid		T Russell	Artefact : 2		Kelleher Nightingale Cc 100575			147.01	-35.96
55-6-0073	Sargent Rd - mm7	GDA	55	498413	6020640	Open site Valid		T Russell	Modified Tree (Carved or Scarred) : 1		Mr.Michael Mulvaney			146.98	-35.96
55-6-0008	Jindera;	AGD	55	494382	6019229	Open site Valid			Artefact : -	Open Camp Site	ASRSYS	54		146.94	-35.97
55-6-0009	Jindera;	AGD	55	494848	6018412	Open site Valid			Artefact : -	Open Camp Site	ASRSYS	54		146.94	-35.98
55-6-0034	BP 1 (Howlong)	AGD	55	494400	6021520	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	100576		146.94	-35.95
55-6-0035	BP 2 (Howlong)	AGD	55	495950	6022250	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	100576		146.96	-35.94
55-6-0036	BP 3 (Holwong)	AGD	55	495700	6022300	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	100576		146.95	-35.94
60-3-0019	M12;	AGD	55	500050	6017630	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350		147.00	-35.98
60-3-0020	M1;	AGD	55	500600	6016320	Open site Valid			Modified Tree (Carved Scarred Tree		Laura-Jane Smith	2350		147.01	-36.00
60-3-0021	M2;	AGD	55	501520	6015840	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350		147.02	-36.00
60-3-0022	M3;	AGD	55	501650	6016160	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350	425	147.02	-36.00
60-3-0023	M4;	AGD	55	501500	6016390	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350		147.02	-36.00
60-3-0024	M5;	AGD	55	501600	6016380	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350		147.02	-36.00
60-3-0025	M6;	AGD	55	501690	6016440	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350		147.02	-35.99
60-3-0026	M7;	AGD	55	501680	6016510	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350		147.02	-35.99
60-3-0027	M8;	AGD	55	501600	6016700	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350		147.02	-35.99
60-3-0028	M9;	AGD	55	499460	6016170	Open site Valid			Modified Tree (Carved Scarred Tree		Laura-Jane Smith	2350		147.00	-36.00
60-3-0029	M10;	AGD	55	499700	6016100	Open site Valid			Artefact : -	Open Camp Site	Laura-Jane Smith	2350		147.00	-36.00
60-3-0031	M13;	AGD	55	500550	6018110	Open site Valid			Artefact : -, Modified Tr	Open Camp Site,Scarr	Laura-Jane Smith	2380		147.01	-35.98
60-3-0032	M14;	AGD	55	500800	6018130	Open site Valid			Modified Tree (Carved Scarred Tree		Laura-Jane Smith	2350		147.01	-35.98
60-3-0033	M15;	AGD	55	501100	6018950	Open site Valid			Modified Tree (Carved Scarred Tree		Laura-Jane Smith	2350		147.01	-35.97
60-3-0005	One Tree Hill;TS7;	AGD	55	498711	6015983	Open site Valid			Artefact : -	Open Camp Site	ASRSYS	230		146.99	-36.00
60-3-0006	One Tree Hill;Ettamogr	AGD	55	498449	6014793	Open site Valid			Modified Tree (Carved Scarred Tree		ASRSYS	230		146.98	-36.01
60-3-0007	One Tree Hill;Ettamogr	AGD	55	498449	6014793	Open site Valid			Modified Tree (Carved Scarred Tree		ASRSYS	230		146.98	-36.01
60-3-0008	One Tree Hill;Ettamogr	AGD	55	498449	6014793	Open site Valid			Modified Tree (Carved Scarred Tree		ASRSYS	203,230		146.98	-36.01
60-3-0009	One Tree Hill;TS6;	AGD	55	498082	6014972	Open site Valid			Modified Tree (Carved Scarred Tree		ASRSYS	203,230		146.98	-36.01
60-3-0010	One Tree Hill;TS5;	AGD	55	498165	6015795	Open site Valid			Modified Tree (Carved Scarred Tree		ASRSYS	230		146.98	-36.00
60-3-0011	One Tree Hill;TS4;	AGD	55	494078	6013285	Open site Valid			Modified Tree (Carved Scarred Tree		ASRSYS	230		146.94	-36.02
55-6-0004	Jindera;	AGD	55	492885	6022687	Open site Valid			Artefact : -	Open Camp Site	ASRSYS	54,276		146.92	-35.94
55-6-0005	Jindera;	AGD	55	493809	6021691	Open site Valid			Artefact : -	Open Camp Site	ASRSYS	54		146.93	-35.95
55-6-0006	Jindera;	AGD	55	494358	6021606	Open site Valid			Artefact : -	Open Camp Site	ASRSYS	54		146.94	-35.95
55-6-0007	Jindera;	AGD	55	494382	6019229	Open site Valid			Artefact : -	Open Camp Site	ASRSYS	54		146.94	-35.97
60-3-0070	AWH 1 PAD 10	GDA	55	499260	6016050	Open site Valid		Colin Clark	Artefact : 5		Mr.Terence J. Kelly	99657	2246,2334	146.99	-36.00
61-1-0116	Woolshed Creek (1)	AGD	55	501487	6012538	Open site Valid			Artefact : -		Terrence J. Kelly Arch	99052	2075,2230	147.02	-36.03
60-3-0092	Albury Wadonga Highv	AGD	55	498446	6013670	Open site Valid		T Russell	Artefact : -		Parklands - Albury Wodonga			146.98	-36.02
55-6-0091	Sargent Rd 2	GDA	55	498377	6020714	Open site Valid			Modified Tree (Carved or Scarred) : -		Office of Environment & Heritage			146.98	-35.96
60-3-0069	Little Billabong	AGD	55	498270	6013291	Open site Valid			Modified Tree (Carved or Scarred) : -		Archaeological Risk Assessment Services (ARAS),Mr.Giles Hamm			146.98	-36.02
60-3-0077	AWH 8 PAD 6	AGD	55	498375	6013678	Open site Valid		Searle	Artefact : 15		Mr.Terence J. Kelly,Mr.Stephen Pollock	2334		146.98	-36.02
60-3-0078	AWH 9 PAD 7	AGD	55	498476	6013866	Closed si Valid		Searle	Artefact : 26		Mr.Terence J. Kelly,Mr.Stephen Pollock	2334		146.98	-36.02
60-3-0079	AWH 10 PAD 8	AGD	55	498598	6014004	Open site Valid		Searle	Artefact : 24		Mr.Terence J. Kelly,Mr.: 99657	2334		146.99	-36.02
60-3-0080	AWH 11 PAD 9	AGD	55	499036	6015329	Open site Valid		Searle	Artefact : 23		Mr.Terence J. Kelly,Mr.: 99657	2334		146.99	-36.00
61-1-0119	Woolshed Creek Ar1	GDA	55	501500	6012639	Open site Valid		T Russell	Artefact : 4		Parklands - Albury Wodonga			147.02	-36.03
60-3-0081	Woolshed Creek Ar2	GDA	55	500000	6012664	Open site Valid		T Russell	Artefact : 1		Parklands - Albury Wodonga			147.00	-36.03
61-1-0120	Woolshed Creek Ar3	GDA	55	501471	6012663	Open site Destroyed		T Russell	Artefact : 1		Parklands - Albury Wodonga		4077	147.02	-36.03
61-1-0121	Woolshed Creek Ar4	GDA	55	501428	6012663	Open site Destroyed		T Russell	Artefact : 1		Parklands - Albury Wodonga		4077	147.02	-36.03
61-1-0122	Woolshed Creek Ar5	GDA	55	501423	6012665	Open site Destroyed		T Russell	Artefact : 1		Parklands - Albury Wodonga		4077	147.02	-36.03
61-1-0123	Woolshed Creek Ar6	GDA	55	501336	6012625	Open site Valid		T Russell	Artefact : 1		Parklands - Albury Wodonga			147.01	-36.03
61-1-0140	Woolshed Creek Ar25	GDA	55	501486	6012650	Open site Valid		T Russell	Artefact : 1		Parklands - Albury Wodonga			147.02	-36.03
61-1-0141	Woolshed Creek Ar26	GDA	55	501370	6012619	Open site Valid		T Russell	Artefact : 1		Parklands - Albury Wodonga			147.02	-36.03
61-1-0143	Woodshed Creek Ar28	GDA	55	501207	6012632	Open site Valid		T Russell	Artefact : 1		Parklands - Albury Wodonga			147.01	-36.03
61-1-0152	Eight Mile Creek Ar44	GDA	55	500468	6012673	Open site Valid		T Russell	Artefact : 1		Parklands - Albury Wodonga			147.01	-36.03
61-1-0153	Eight Mile Creek Ar45	GDA	55	500343	6012835	Open site Valid		T Russell	Artefact : 1		Parklands - Albury Wodonga			147.00	-36.03
60-3-0093	Mitchell Park Scar Tree	AGD	55	498521	6013801	Open site Valid		T Russell	Modified Tree (Carved or Scarred) : 1		Parklands - Albury Wodonga			146.98	-36.02
55-6-0103	Nexus AS1	GDA	55	497178	6016606	Open site Destroyed			Artefact : 1		Biosis Research,Ms.Asl 103840		4118	146.97	-35.99
55-6-0104	Nexus AS2	GDA	55	497470	6016626	Open site Destroyed			Artefact : 1		Biosis Research,Ms.Asl 103840		4118	146.97	-35.99

55-6-0105	Nexus AS3	GDA	55	497753	6016671	Open site Destroyed	Artefact : 1	Biosis Research,Ms.Asl	103840	4118	146.98	-35.99
55-6-0106	Nexus AS4	GDA	55	497726	6016789	Open site Destroyed	Artefact : 1	Biosis Research,Ms.Bri	103840	4118	146.97	-35.99
55-6-0107	Nexus AS5	GDA	55	497424	6016897	Open site Destroyed	Artefact : 1	Biosis Research,Ms.Bri	103840	4118	146.97	-35.99
55-6-0108	Nexus AS6	GDA	55	497424	6017034	Open site Destroyed	Artefact : 1	Biosis Research,Ms.Bri	103840	4118	146.97	-35.99
55-6-0109	Nexus AS7	GDA	55	497030	6017049	Open site Destroyed	Artefact : 1	Biosis Research,Ms.Bri	103840	4118	146.97	-35.99
60-3-0121	Nexus AS8	GDA	55	497609	6015930	Open site Destroyed	Artefact : 1	Biosis Research,Ms.Bri	103840	4118	146.97	-36.00
61-1-0263	Restriction applied. Ple					Open site Valid		Mr.Luke Atkinson,AECOM Sydney				
61-1-0258	TH-AS1-16	GDA	55	500601	6013066	Open site Partially Destroyed	Artefact : 1, Potential Archaeological Deposit (F	Mr.Luke Atkinson,AECOM Sydney		4077	147.01	-36.03
61-1-0259	TH-IA2-16	GDA	55	501298	6012679	Open site Partially Destroyed	Artefact : 1	Mr.Luke Atkinson,AECOM Sydney		4077	147.01	-36.03
61-1-0262	TH-IA1-16	GDA	55	501409	6013564	Open site Partially Destroyed	Artefact : 1	Mr.Luke Atkinson,AECOM Sydney		4077	147.02	-36.02

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 27381

Client Service ID : 440700

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>	<u>Context</u>	<u>Site Status</u>	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
55-6-0064	mungabarina-mm1	GDA	55	497451	6017233	Open site	Destroyed	Modified Tree (Carved or Scarred) : 1		
	<u>Contact</u> Sarah Colley	<u>Recorders</u>	Biosis Pty Ltd - Sydney,Mr.Michael Mulvaney,Ms.Meaghan Aitchison						<u>Permits</u>	
55-6-0108	Nexus AS6	GDA	55	497424	6017034	Open site	Destroyed	Artefact : 1		103840
	<u>Contact</u>	<u>Recorders</u>	Biosis Research,Ms.Bridget Grinter						<u>Permits</u> 4118	

Report generated by AHIMS Web Service on 08/08/2019 for Samantha Keats for the following area at Lot : 3, DP:DP233061 with a Buffer of 50 meters. Additional Info : ACHA. Number of Aboriginal sites and Aboriginal objects found is 2

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Appendix 2 Test excavation results

Table 10 Test Pit Log PAD 1

Test Pit	Depth (mm)		Munsell	pH
1	0-80	Clayey silt	4/3 7.5YR	5.5
	80-130	Sandy silt	6/2 7.5 YR	6
	130	Clay	5/6 7.5YR	5.5
2	0-130	Clayey silt	4/3 7.5YR	5.5
	130-200	Sandy silt	6/2 7.5 YR	5.5
	200	Clay	5/6 7.5YR	5.5
3	0-100	Clayey silt	3/2 7.5YR	6.5
	100-200	Silty clay with small gravel inclusions	6/2 5YR	6.5
	200-300	Silty clay with small gravel inclusions	6/2 5YR	6.5
	300	Clay	4/2 5YR	6
4	0-100	Clayey silt	5/2 7.5 YR	6.5
	100-200	Sandy silt	4/3 7.5YR	6.5
	200-300	Sandy silt	5/2 7.5YR	5.5
	300	Clay	5/6 7.5YR	5.5
5	0-130	Clayey silt	3/2 10YR	5.5
	130-220	Sandy silt undulating contact with base clay	5/3 10 YR	5.5
	220	Clay	4/4 10YR	5.5

Table 11 Test Pit Log PAD 2

Test Pit	Depth (mm)		Munsell	pH
1	0-100	Silty sand with small to medium quartz granules (5-15mm)	4/2 5YR	5.5
	100-340	Silty sand with fine quartz grains	6/4 7.5YR	6
	340-400	Firm sandy clay. Clay content increasing with depth	3/4 2.5YR	5.5
2	0-100		5/4 5YR	6.5
	100-200	Silty sand with fine quartz grains	4/6 5YR	6.5
	200-220	Firm sandy clay. Clay content increasing with depth	4/6 5YR	6.5
	220	Clay	3/4 2.5YR	6
3	0-100	Silty sand with small to medium quartz granules (5-15mm)	4/3 7.5YR	6.5
	100-200	Silty sand with fine quartz grains	6/3 7.5YR	6.5
	200-300	Silty sand with fine quartz grains	7/3 7.5 YR	6.5
	300-400	Silty sand with fine quartz grains	5/4 7.5 YR	6.5
	400	Clay	3/4 2.5YR	6.5
4	0-60	Silty sand with small to medium quartz granules (5-15mm)	4/2 5YR	5.5
	60-180	Silty sand with fine quartz grains	6/4 7.5YR	6
	180	Firm sandy clay. Clay content increasing with depth	3/4 2.5YR	5.5
5	0-40	Silty sand with small to medium quartz granules (5-15mm)	4/2 5YR	5.5
	40-120	Silty sand with fine quartz grains	6/4 7.5YR	6
	120	Firm sandy clay. Clay content increasing with depth		6