

Tallawarra Lands Concept Plan
Approval Modification

APPENDIX

N

ARCHAEOLOGICAL REPORT: CENTRAL RECINCT

Tallawarra Lands Central Precinct: Aboriginal cultural heritage assessment report

DRAFT REPORT

Prepared for Cardno

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- Warra Bingi Nunda Gurri
- Woronora Plateau Gundangara Elders Council
- Darug Land Observations
- Three Ducks Dreaming Surveying and Consulting
- The Wadi Wadi Coomaditchie Aboriginal Corporation
- Guunamaa Dreaming and Sites Surveying
- James Davis
- Goobah Development Pty Ltd (Murrin Clan/Peoples)
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Glossary

ACHAR	Aboriginal Cultural Heritage Assessment Report
AHIMS	Aboriginal Heritage Information Management System
DA	Determining Authority
DECCW	Department of Environment, Climate Change and Water (now OEH)
DP	Deposited Plan
EPA	Environment Planning and Assessment
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
NPW Act	National Parks and Wildlife Act
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
RAP	Registered Aboriginal Party
REF	Review of Environmental Factors
REP	Regional Environmental Plan
SEPP	State Environmental Planning Policy
NNTT	National Native Title Tribunal
ICOMOS	International Council on Monuments and Sites

Summary

Biosis Pty Ltd was commissioned by Cardno on behalf of Bridgehill Group to undertake an Aboriginal cultural heritage assessment (ACHA) (this report) and archaeological report (AR) of a proposed residential development of the Tallawarra Central Precinct, Yallah NSW. The study area is located in lot 15 DP 1050255, lot 1 DP 1146409, lot 102 DP 716727, lot 1 DP 551658, lot 1 DP 543285, lot 7 DP 1049520 and lot 8 DP 1049520. It is approximately 14 kilometres south west of the Wollongong central business district (CBD).

Bridgehill Group have acquired some of the Tallawarra Lands in the Northern and Central Precincts from Energy Australia, and intend to develop new residential communities, a light industrial development, and tourism facilities on those lands. The original concept approval (MP09_0131) was granted on 23 May 2013 by the Planning Assessment Commission as a delegate for the Minister for Planning and Infrastructure for a mixed use development including residential, commercial, industrial and retail development, public open space areas, new recreational facilities, environmental management, conservation areas and riparian corridors at Tallawarra Lands, Yallah.

Bridgehill Group, intends to modify the existing concept approval for the Central Precinct at Tallawarra, Yallah (MP 09_0131 MOD 1) under Part 3A section 75W of the *Environmental Planning and Assessment Act 1979*.

This ACHA covers the Central Precinct (the study area), and aims to determine whether the proposed modification will have any additional impacts on Aboriginal cultural values. The purpose of this assessment is to support an EIS application to modify the existing concept approval for the Central Precinct (MP 09_0131 MOD 1) to allow an increased residential lot yield.

This report has responded to Section 6.10.1 Aboriginal Cultural Heritage of the *Tallawarra Lands, Yallah: Request for Secretary's Environmental Assessment Requirements* (Urbis 2016) to:

- Confirm the location of the above archaeological site relative to the proposed expanded areas.
- Consultation with relevant stakeholders will be carried out prior to preparation of the EIS.
- Identifying the nature and extent of impacts on Aboriginal and cultural heritage values across the project area; and
- Provide the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable or mitigate impacts of the project or Aboriginal cultural heritage values.

SEARs Item	Response
12. Aboriginal Cultural Heritage Aboriginal Cultural Heritage Assessment in accordance with the Guide to investigating Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW 2011) and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW)	<p>This report has been conducted in accordance with the <i>Guide to Investigating Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> (OEH 2011).</p> <p>This report supports the Aboriginal cultural heritage assessment, which has been conducted in accordance with the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> (DECCW 2010b). Consultation with Registered Aboriginal Parties is currently underway.</p>

There are 86 Aboriginal cultural heritage sites registered with the Aboriginal Heritage Information Management System (AHIMS) register in the vicinity of the study area, four of which are located within the study area; TLPD AFT 7 (AHIMS 52-5-0613), TLPD AFT 8 (AHIMS 52-5-0614), TLPD AFT 9 (AHIMS 52-5-0615), and Tallawarra Pipeline PAD 3 (AHIMS 52-5-0523).

The survey was conducted on 29 June 2017. 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 combined with a low amount of exposures.

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

Based on the site survey and previous assessments the drainage line that runs through the study area and into Ducks Creek was assessed as having high archaeological potential to contain further subsurface cultural deposits, as their proximity to useful resources and fresh water made them valuable occupation areas. The ridgeline in the study area was assessed as having moderate potential as previous research had determined that the landform is likely to contain low density or isolated artefacts that were discarded as Aboriginal people travelled along them.

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 Illawarra Mercury newspaper (20 June 2017), which resulted in the following Aboriginal organisations registering their interest:

- Illawarra Local Aboriginal Land Council (ILALC)
- Warra Bingi Nunda Gurri
- Woronora Plateau Gundagara Elders Council
- Darug Land Observations
- Three Ducks Dreaming Surveying and Consulting
- The Wadi Wadi Coomaditchie Aboriginal Corporation
- Guunamaa Dreaming and Sites Surveying
- James Davis
- Goobah Development Pty Ltd (Murrin Clan/Peoples)
- Murramarang (Murrin Clan/Peoples)
- Minnamunnung
- Duncan Falk Consultancy
- Cullendulla (Murrin Clan/Peoples)
- Biamanga (Murrin Clan/Peoples)

A search conducted by the Office of the Registrar, *Aboriginal Land Rights Act 1983* listed no Aboriginal Owners with land within the study area. The National Native Title Tribunal did not respond to the request for 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 *Project Information and Assessment Methodology, Aboriginal Cultural Heritage*

Assessment: Northern and Central Precincts at Tallawarra, Yallah NSW. Responses from the Registered Aboriginal Parties (RAPs) are included in Appendix 3.

The outcome of the consultation process will be documented in this assessment report once RAP's have reviewed this report. The 2010 Aboriginal archaeological assessment conducted for the study area identified that the study area is considered to have high cultural significance due to the presence of Aboriginal archaeological sites and the study area proximity to Lake Illawarra, Duck Creek and Mount Brown (Biosis 2010).

Conclusions

This assessment has concluded that impacts to site Tallawarra Pipeline PAD 3 (AHIMS 52-5-0523) cannot be avoided by the proposed development. The proposed modification will therefore have an additional impact on Aboriginal cultural heritage.

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* (DECCW 2010b) (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: Further archaeological assessment is required in areas of moderate and high archaeological potential

Areas identified as having high and moderate archaeological potential should be avoided wherever possible (Figure 5). If impacts to these areas cannot be avoided subsurface investigations (test excavations) will be required prior to the commencement of works as a condition of the DA or concept approval. Test excavations should be conducted in accordance with the *Code of Practice for archaeological investigation for Aboriginal objects in NSW* (DECCW 2010b) and *Aboriginal cultural heritage consultation requirements for proponents in New South Wales* (DECCW 2010a).

Recommendation 2: Further archaeological assessment is required at Tallawarra Pipeline PAD 3 (AHIMS 52-5-0523)

If impacts to Tallawarra Pipeline PAD 3 (AHIMS 52-5-0523) cannot be avoided, subsurface investigations (test excavations) will be required prior to the commencement of works as a condition of the DA or concept approval. Test excavations should be conducted in accordance with the *Code of Practice for archaeological investigation for Aboriginal objects in NSW* (DECCW 2010b) and *Aboriginal cultural heritage consultation requirements for proponents in New South Wales* (DECCW 2010b).

Recommendation 3: Conservation of Fig Tree associated with TLPD AFT 9 (AHIMS 52-5-0615)

If possible the Fig Tree associated with TLPD AFT 9 (AHIMS 52-5-0615) should be conserved and incorporated into the modification of the concept approval.

Recommendation 4: No further archaeological assessment is required in areas of low archaeological potential

No further archaeological work is required in areas identified as having low archaeological potential except in the event that unexpected Aboriginal sites, objects or human remains are unearthed during development (refer to Recommendations 9 and 10 below).

Recommendation 5: Fencing of AHIMS sites

AHIMS sites or PAD areas located within 30 metres of the area of proposed works should be clearly marked and fenced in order to avoid unintentional impacts during construction.

Recommendation 6: Aboriginal cultural heritage induction for workers and contractors

The locations of each AHIMS site and PAD area located within the Tallawarra Lands development should be clearly mapped. Workers and contractors working at, or visiting the site should be made aware of the location of all AHIMS sites and PAD areas within the Tallawarra Lands development through an Aboriginal cultural heritage induction.

Recommendation 7: Application for an Aboriginal heritage impact permit (AHIP)

Should the Development Application (DA) be approved, it is recommended that Cardno apply to OEH for an AHIP to destroy the listed Aboriginal sites within the study area which are currently protected under the NSW *National Parks and Wildlife Act 1974*. **The AHIP should be for a term of ten (10) years.** The sites that will be impacted by the proposed works are as follows

- TLPD AFT 7 (AHIMS 52-5-0613)
- TLPD AFT 8 (AHIMS 52-5-0614)
- TLPD AFT 9 (AHIMS 52-5-0615)
- Tallawarra Pipeline PAD 3 (AHIMS 52-5-0523)

For information about AHIPs and their preparation, see below.

Advice preparing AHIPs

An AHIP is required for any activities likely to have an impact on Aboriginal objects or Places or cause land to be disturbed for the purposes of discovering an Aboriginal object. The Office of Environment and Heritage (OEH) issues AHIPs under Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act).

AHIPs should be prepared by a qualified archaeologist and lodged with the OEH. Once the application is lodged processing time can take between 8-12 weeks. It should be noted that there will be an application fee levied by the OEH for the processing of AHIPs, which is dependent on the estimated total cost of the development project.

Recommendation 8: Cardno must abide by the conditions of the AHIP once obtained from OEH

The AHIP will be issued with conditions pertaining to the management and mitigation of Aboriginal heritage sites within the study area. These conditions will be outlined in Schedules A, B and C as follows:

- Schedule A: Aboriginal objects which must not be harmed.
- Schedule B: Aboriginal objects that may be harmed through certain actions.
- Schedule C: Aboriginal objects which may be harmed through the proposed works.

Cardno must undertake all further works to ensure the condition of the AHIP are met before construction begins.

Recommendation 9: Discovery of Unanticipated Aboriginal Objects

All Aboriginal objects and Places are protected under the *NSW National Parks and Wildlife Act 1974*. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the OEH. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object, the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

Recommendation 10: Discovery of Aboriginal Ancestral Remains

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

1. Immediately cease all work at that location and not further move or disturb the remains
1. Notify the NSW Police and OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
2. Not recommence work at that location unless authorised in writing by the OEH.

Recommendation 11: Continued consultation with the registered Aboriginal stakeholders

As per the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010a), 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 sites within the study area throughout the life of the project.

1 Introduction

1.1 Project background

Biosis Pty Ltd was commissioned by Cardno to undertake an Aboriginal cultural heritage assessment of a proposed residential development of the Tallawarra Central Precinct, Yallah NSW. This assessment will support an Environmental Impact Statement (EIS) application to modify the existing concept approval for the Central Precinct (MP 09_0131 MOD 1) to allow an increased residential lot yield.

The original concept approval (MP09_0131) was granted on 23 May 2013 by the Planning Assessment Commission as a delegate for the Minister for Planning and Infrastructure for a mixed use development including residential, commercial, industrial and retail development, public open space areas, new recreational facilities, environmental management, conservation areas and riparian corridors at Tallawarra Lands, Yallah.

A previous Aboriginal archaeological assessment for the Tallawarra Lands Part 3A Concept Plan (MP 09_0131) was conducted by Biosis in 2010. The previous assessment consisted of an Aboriginal archaeological survey, Aboriginal community consultation, and Aboriginal archaeological test excavations (Biosis 2010). An impact assessment conducted as part of the 2010 assessment concluded that three Aboriginal archaeological sites TLPD AFT-7 (AHIMS 52-5-0613), TLPD AFT-8 (AHIMS 52-5-0614), and TLPD AFT-9 (AHIMS 52-5-0615), along with a Fig Tree identified as having cultural significance; would be impacted on by the proposed development. Site Tallawarra Pipeline PAD3 (AHIMS 52-5-0523) is also located within the study area however the previous assessment determined that it would not be impacted on.

All AHIMS sites located within the study area were assessed as having high cultural significance. TLPD AFT-7 (AHIMS 52-5-0613), TLPD AFT-8 (AHIMS 52-5-0614), and TLPD AFT-9 (AHIMS 52-5-0615) were assessed as having low archaeological significance, while Tallawarra Pipeline PAD3 (AHIMS 52-5-0523) was determined to have unknown archaeological significance.

The majority of the Central Precinct study area was assessed as having moderate subsurface archaeological potential, with the northern section of the study area assessed as having low subsurface archaeological potential based on the results of the archaeological test excavations, and predictive modelling. The area along the first order tributary to Ducks Creek, located within the centre of the study area was assessed as having high subsurface archaeological potential. Further assessment in the form of additional archaeological test excavations in areas of high and moderate subsurface archaeological potential were recommended prior to development in order to establish the significance and extent of the archaeological resource.

The purpose of this assessment is to determine if the proposed modification will impact on any additional areas of archaeological potential or Aboriginal sites or objects; in particular Tallawarra Pipeline PAD3 (AHIMS 52-5-0523). 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 2010a) ('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.

1.2 Study area

The study area is located within the Tallawarra Central Precinct, Yallah NSW (Figure 1). It encompasses lot 15 DP 1050255, lot 1 DP 1146409, lot 102 DP 716727, lot 1 DP 551658, lot 1 DP 543285, lot 7 DP 1049520 and lot 8 DP 1049520 and is approximately 14 kilometres south west of Wollongong central business district (CBD) (Figure 2). The Central Precinct area covers 73.2 hectares of private access land.

The study area is within the:

- Wollongong Local Government Area (LGA).
- Parish of Calderwood
- County of Camden

The study area is bounded by Yallah Bay Road to the south, Princes Motorway to the west the suburb of Dapto to the north, and rural land to the east (Figure 2).

1.3 Proposed development

The Tallawarra Central Precinct comprises lot 15 DP 1050255, lot 1 DP 1146409, lot 102 DP 716727, lot 1 DP 551658, lot 1 DP 543285, lot 7 DP 1049520 and lot 8 DP 1049520, with an area of 73.2 hectares. The development of the Central Precinct will comprise commercial, retail, industrial, open space and associated civil works (Figure 3). The modification to the concept approval seeks to increase the footprint and residential yield for the Central Precinct from 350 lots to 588 lots. Currently approved components of the concept plan for the Central Precinct include:

- Approximately 340 residential lots (27 hectares) and 10 large residential lots (11 hectares) to be modified to 588 residential lots.
- A Neighbourhood Centre (4.25 hectares), incorporating a small supermarket, speciality shops, medical centre and child-care centre
- A tourism (2.5 hectares) use on the Lake foreshore headland at the eastern end of the precinct
- An open space, incorporating the residential sports ground and Duck Creek riparian lands (109 hectares environmental and recreational)
- Industrial and light industrial uses (54 hectares)

The following amendments are proposed to the Concept Plan for the Central Precinct:

- Expand the R2 Zone (for low density residential development) east, into the E3 Environmental Management zone.
- Expand the R2 zone (for low density residential) north into the R5 (large lot residential) zone.
- Minor alterations to R2 zone (for low density residential development) into E3 Environmental Management Zone.
- The composition of lots has been altered from the Concept Plan, with a new indicative layout that includes lots down to 300m² and 12.5 metres frontages, where suited to the topography of the site.

1.4 Planning approvals

The proposed development will be assessed under Part 3A section 75W 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*.
- NSW *National Parks and Wildlife Act 1974* (NPW Act).
- NSW *National Parks and Wildlife Amendment Act 2010*.
- Infrastructure State Environmental Planning Policy 2007.
- Wollongong Development Control Plan 2009.

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 Attachment.

1.6 Aboriginal cultural heritage

1.6.1 General description

According to Allen and O'Connell (2003), Aboriginal people have inhabited the Australian continent for the last 50,000 years. New evidence out of the Northern Territory has pushed this date back to around 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 the meaning of site, objects and places 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 (DECCW 2010a p.3). 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' (DECCW 2010a p.iii).

Aboriginal people's interpretation of cultural value is based on their "traditions, observance, lore, customs, beliefs and history" (DECCW 2010a p.3). The things associated with Aboriginal cultural heritage are continually and actively being defined by Aboriginal people (DECCW 2010a p.3). These things can be associated with traditional, historical or contemporary Aboriginal culture (DECCW 2010a p.3).

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).

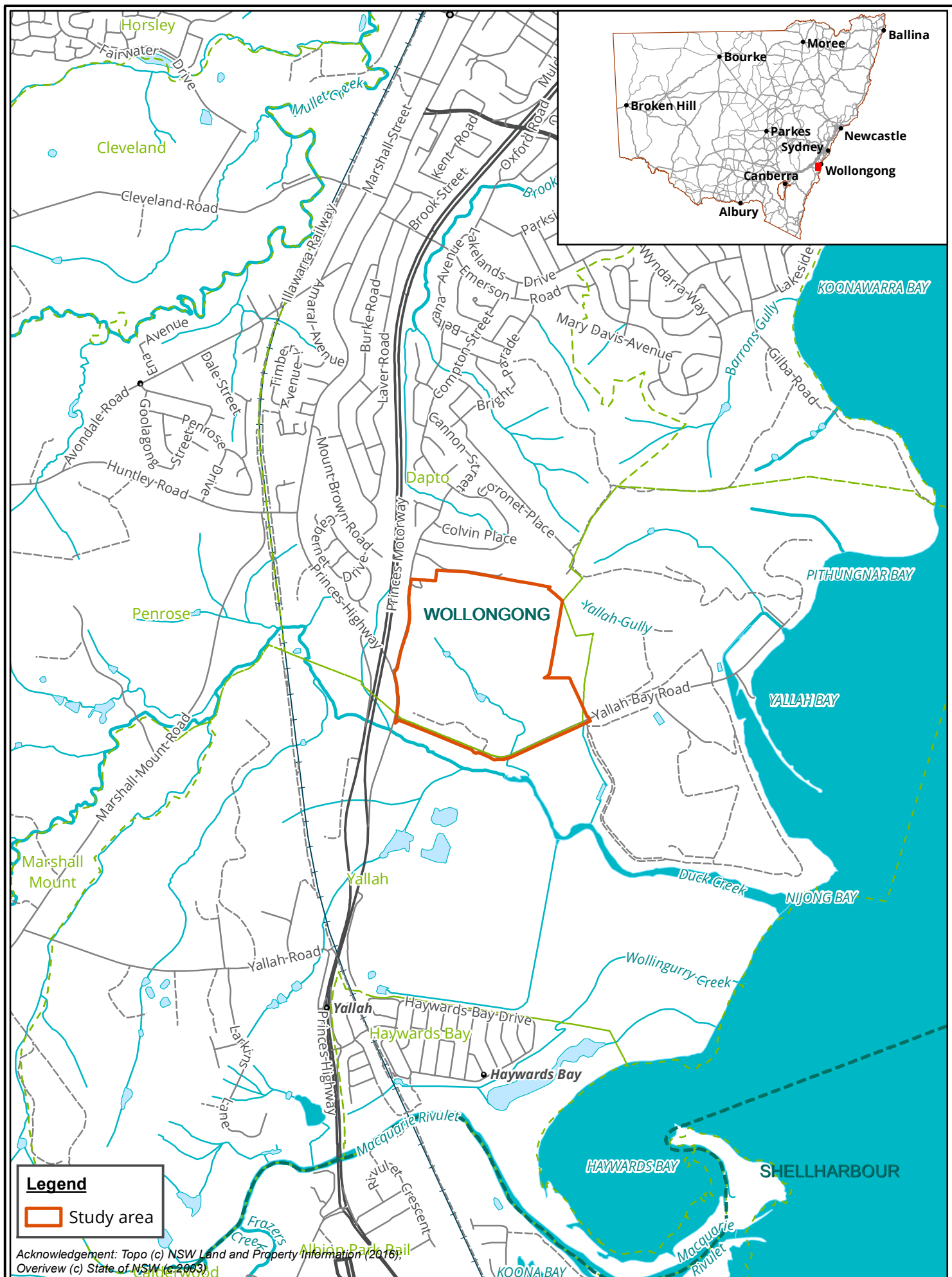
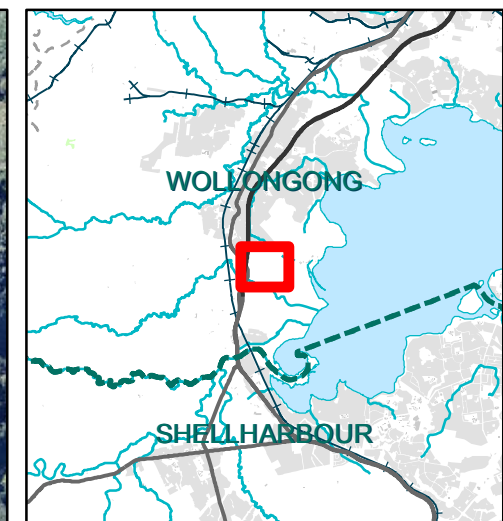


Figure 1: Location of the study area in a regional context



Legend

Study area

Figure 2: Study area detail

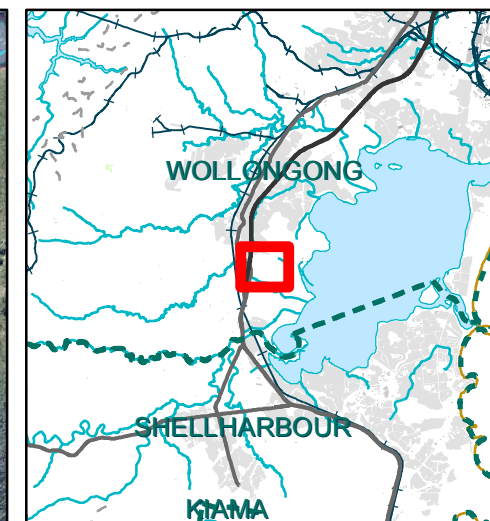
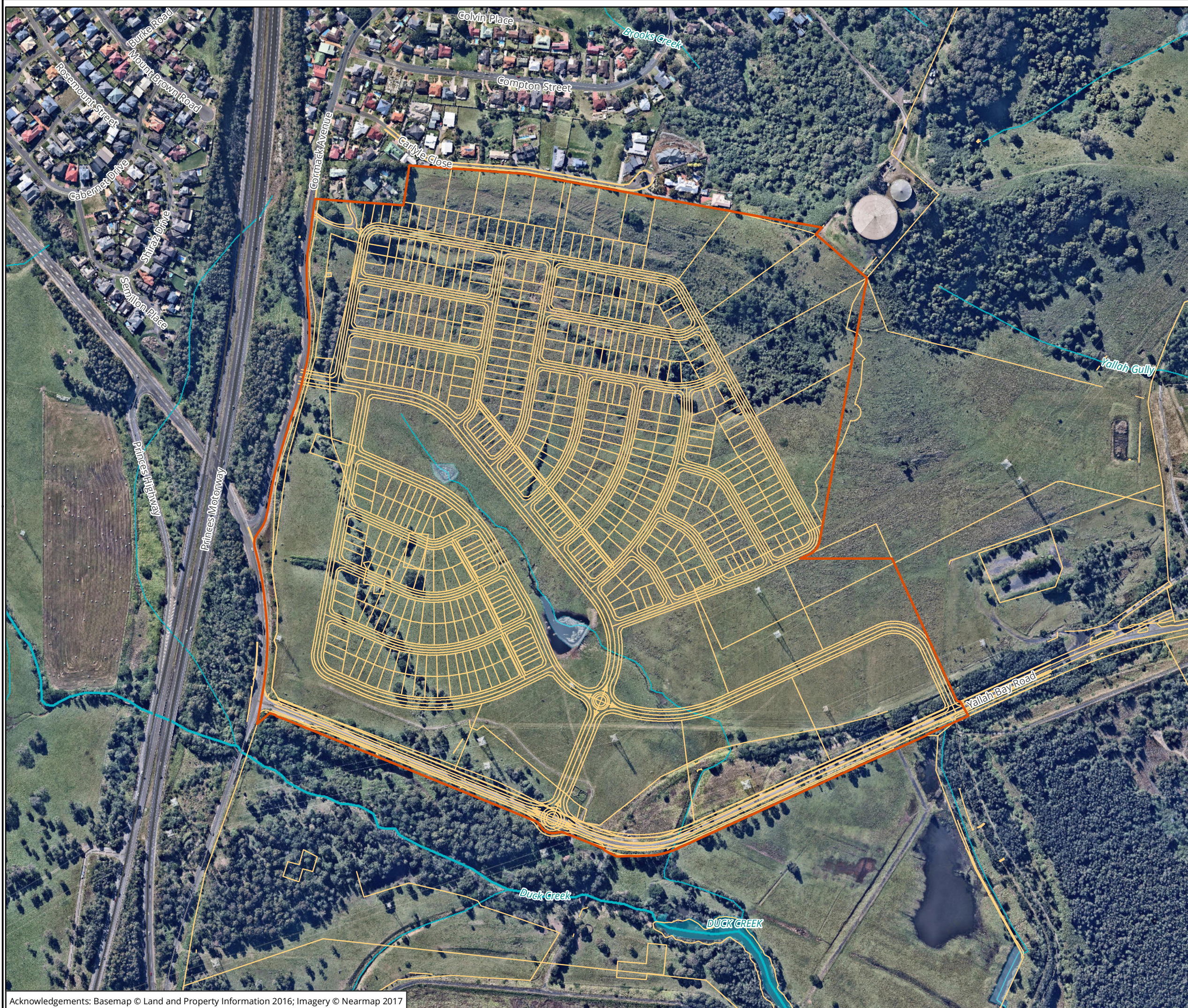
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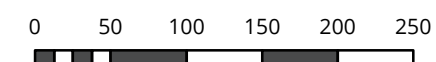
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Date: 12 July 2017,
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Legend

- Study area
- Proposed development

Figure 3: Proposed development



Metres
 Scale: 1:5,000 @ A3
 Coordinate System: GDA 1994 MGA Zone 56



Matter: 24090
 Date: 23 August 2017,
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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 2010b).

The study area is located within the coastal plain between the Illawarra Escarpment and Lake Illawarra (Figure 1).

2.1 Topography and hydrology

The Illawarra region forms part of the Sydney Basin; a geological basin filled with near horizontal sandstones and shales of Permian to Triassic age overlying older basement rocks of the Lachlan Fold Belt. The Illawarra subregion of the Sydney Basin is characterised by Permian siltstones, shale, sandstones and interbedded volcanics on and below the coastal escarpment. The geology of the region provides useful stone resources for toolmaking, including volcanic rocks useful for the manufacture of edge ground axes.

The study area is situated on the Coastal Plain on the edge of Lake Illawarra and the Escarpment. This physiographic unit has formed from the gradual recession westward of the Plateau (Bowman 1971). The Coastal Plain is characterised as a mosaic of foothills, ridges, spurs, hillocks and floodplains with slopes varying from very gently inclined, to steep with the occasional low cliff. It is dissected by easterly flowing streams at intervals that become more frequent towards the north (Fuller 1982, p.18). The Coastal Plain is widest at the points where the Macquarie Rivulet has entrenched into the Plateau at Macquarie Pass and where other waterways that provide the catchment area of Lake Illawarra carved into the Escarpment (Bowman 1971).

The Central Precinct is located approximately 750 metres inland from the shore of Lake Illawarra. Lake Illawarra was formed from the drowning of the Macquarie Rivulet valley during the raising of Holocene sea levels (6-7,000 years ago); the estuary was subsequently formed behind the large sand barrier that now forms the Windang Peninsula. Lake Illawarra is the largest estuarine lagoon on the south coast of NSW, covering an area of 33 square kilometres and extending over 9 kilometres in length and 5 kilometres in width. It receives salt water from the Pacific Ocean and fresh water from the Illawarra Escarpment (Roy 1984). Lake Illawarra is classified as an early Intermediate Barrier Estuary or an estuarine lagoon. Barrier estuaries are characterised by 'narrow elongated entrance channels with broad tidal and back barrier sand flats' (Roy 1984, p. 5).

One water stream also passes through the study area. This stream is a non-perennial tributary of Ducks Creek, and so would not have contained water all year round.

Lake Illawarra, Duck Creek, and the first order creek running through the study area would have provided abundant food resources to Aboriginal groups in the area. It is likely that the proximity to water and food will have resulted in the presence of Aboriginal sites, such as middens, in the vicinity of the study area.

2.2 Soil landscapes

Soil landscapes have distinct morphological and topological characteristics that result in specific archaeological potential. Because they are defined by a combination of soils, topography, vegetation and weathering conditions, soil landscapes are essentially terrain units that provide a useful way to summarise archaeological potential and exposure. The study area contains one erosional soil landscape called the

Shellharbour soil landscape, one residual landscape called the Gwynneville soil landscape, and one swamp soil landscape called the Fairy Meadow soil landscape.

Erosional soil landscapes comprise soils that are derived from the erosive action of running water, primarily well-defined streams that have the ability to transport their sediment load. Soils may be either absent, derived from water-washed parent materials, or derived from *in situ* weathered bedrock. Residual soil landscapes are characterised by areas where soils are derived from the long-term, *in situ* weathering of parent materials. Examples of these types of soil landscapes are typically level to undulating elevated landforms, flats and plains, with poorly defined drainage lines. Swamp soil landscapes are dominated by ground surfaces and soils that are at least seasonally wet, with water tables frequently close to the surface. Soil parent material includes large amounts of accumulated decayed organic matter.

The characteristics of the Shellharbour soil landscape are summarised in Table 1.

Table 1 Shellharbour soil landscape characteristics (Hazelton 1992, pp. 58-60)

Soil Landscape	Topography	Soils
Shellharbour	Rolling low hills with long side slopes and broad drainage lines. Relief 30-50 metres. Slopes <20% incline.	Crests and upper slopes: Hard setting black rich clays overlying <100 cm of brown strongly pedal heavy clay. Mid slopes: Up to 20 cm of brownish black sandy loam overlies <50 cm of strongly pedal reddish brown sandy clay. 50 cm of mottled reddish brown sandy clay overlies <50 cm of brown strongly pedal heavy clay. Foot slopes and drainage plains: Up to 40 cm of reddish brown sandy clay overlies >50 cm of strongly pedal brown heavy clay.

The Shellharbour soil landscape has a high to very high erodability rating and would therefore be susceptible to frequent soil movement (Hazelton 1992, pp. 58-60). This would result in poor preservation of archaeological material at shallow depths but would potentially lead to exposures of any deeper archaeological deposits where topsoil has eroded away.

The Gwynneville soil landscape has the following characteristics (Table 2):

Table 2 Gwynneville soil landscape characteristics (Hazelton and Tille 1990, pp. 38-40)

Soil Landscape	Topography	Soils
Gwynneville	Undulating to steep hills with broad to moderate ridges, steeply inclined foot slopes, and isolated rises on the coastal plain. Local relief from 10-70 m, slopes 3-25%.	Ridges: 10-30 cm of friable brown loam overlying bedrock. Upper and mid slopes: 10-30 cm of friable brown loam overlies 100 cm brown pedal clay. Lower slopes and localised position on mid slopes: 20-50 centimetres of brown pedal clay overlies brown pedal clay or bedrock.

The Gwynneville soil landscapes has a moderate soil erodability and would be susceptible to some soil movement as a result. The erodability combined with the shallow loam soils suggests that the preservation of archaeological material is likely to be poor throughout the study area.

The Fairy meadow soil landscape has the following characteristics (Table 3):

Table 3 Fairy meadow soil landscape characteristics (Hazelton and Tille 1990, pp. 100-102)

Soil Landscape	Topography	Soils
Fairy Meadow	Gently undulating alluvial plains including floodplains, valley flats, and terraces. Slopes greater than 5% and relief greater than 20 m.	Upper floodplains and terraces: Up to 20 cm of sandy loam overlying up to 40 cm of sand. Valley flats: Soils are highly variable but a typical soil consists of up to 40 cm of sandy clay loam overlying 50 cm of light clay and 80 cm of heavy clay.

The Fairy meadow soil landscape has a low soil erodability and would therefore preserve any potential sub-surface deposits present; however it is susceptible to flooding and seasonal waterlogging so sites are likely to be present only on raised landforms in this soil landscape (Hazelton and Tille 1990, pp. 100-102).

2.3 Landscape resources

The Coastal Plain of the Illawarra region provides a number of resources used by Aboriginal inhabitants. The geology of the region provides an abundant supply of raw materials. Quartz is the main stone raw-material type suitable for Aboriginal tool manufacture that is likely to occur in the vicinity of the study area in any abundance. This would have been available locally and also from trading with other groups (Donlon and Sefton 1988, p. 23). Igneous material would have come from the south of the study area in areas like Gerringong (Donlon and Sefton 1988, p. 55) due to its volcanic nature. Some of the other fine grain siliceous material may have come from the Cumberland Plain. Silcrete cobbles are known to have occurred along the Cumberland Plain (McDonald 1992), to the north of the study area. Elsewhere on the Plain, the potential raw materials for stone artefact making include silicified wood, tuff, mudstone, quartz, quartzite and basalt. River gravels and cobbles containing silcrete, chert, and other fine grained volcanic rocks were also used (Attenbrow 2010). While previous archaeological work within the region has not identified any specific stone sources, the presence of the volcanic Dapto Latite Member in the region may have provided a suitable source of raw material, providing lithic material for stone axes. Resources would have been accessible in the outcrops of siltstone, shale and tuffaceous sandstones of the Berry Siltstone formation.

Aerial imagery and vegetation mapping undertaken by the National parks and Wildlife Service (NPWS) shows that the study area has been cleared of native vegetation; however, native vegetation communities in the vicinity of the study area and around Lake Illawarra would have been comparable to vegetation found in the study area prior to clearing. These vegetation communities include (NPWS 2002):

- Lowland Woollybutt – Melaleuca Forest located on flat low-lying Shoalhaven Group sediments at elevations between 10 and 35 metres above sea level. It is characterised by the presence of woollybutt (*Eucalyptus longifolia*), stringybark (*E. globoidea*/*E. eugenioides*), and honey myrtle (*Melaleuca decora*).
- Coastal Swamp Oak Forest occurring in estuarine environment that include low-lying areas of coastal floodplain and the fringes of lakes and lagoons. Common and abundant species that occur include swamp oak (*Casuarine glauca*), Common Reed (*Phragmites australis*), and various sedges

A number of these plant species would have been used by Aboriginal groups to make various wooden implements. Wood from the Swamp oak was used to make tools such as nulla nullas, while the bark was removed and made into canoe hulls (Robinson 1991, p.152).

Local Aboriginal groups would have had access to an abundant range of marine, terrestrial and avian species present in the coastal resource zone which would have provided a variety of uses. Marine animals such as cockles, lobster and periwinkles were eaten (Wesson 2009). Abalone and stingrays were also used to make fish hooks and tools in addition to their use as a food source (Wesson 2009). Terrestrial species on the coastal plain, such as kangaroos, possums and wombats would have been exploited for food and to make cloaks, and tools (Attenbrow 2010). Avian species were used as a food source, and in the case of the pelican and black duck were often totem animals for Aboriginal groups (Wesson 2009).

2.4 European land use history

Within the proposed study area, soil disturbance is associated with historic pastoral land-use practices and recreational usage. The entire area between Koonawarra and Yallah bay have been subjected to extensive grazing and agricultural practices from the 1880's onwards (McDonald 1976). As well as vegetation clearing for pasture and agriculture, other land disturbances within the property include construction of the high voltage transmission lines and towers; recreational usage resulting in impact trails particularly by trail bikes and pedestrian traffic in the low lying areas along the foreshore.

Although these past land activities caused disturbances, they may have impacted only the surface contexts of any existing Aboriginal archaeological site; it is unlikely that they would have destroyed sites. Clearing of the land would have most likely removed a great number of native culturally modified trees.

3 Aboriginal cultural heritage context

3.1 Ethnohistory

Despite a proliferation of known indigenous sites there is considerable ongoing debate about the nature, territory and range of pre-contact indigenous language groups in the greater Sydney. These debates have arisen largely due to the lack of ethnographic and linguistic information recorded at the time of European contact. By the time colonial diarists, missionaries and proto-anthropologists began making detailed records of indigenous people in the late 19th century; pre-European indigenous groups had been broken up and reconfigured by European settlement activity. The following information relating to indigenous people on the Illawarra is based on early ethnographic accounts.

Although there are conflicting views between historical sources of the exact boundaries of tribal groups in the region, the linguistic evidence does identify distinct language groups at the time of European contact. Based on this information it appears that the study area was situated within the Tharawal (also Dharawal, Darawal, Carawal, Turawal, Thurawal) linguistic group. The named groups (often referred to as 'clans', 'bands' or 'tribes') belonging to the Tharawal/Dharawal language group included the following: Gweagal, Norongerraga, Illawarra, Threawal, Tagary, Wandandega, Wodi Wodi and Ory-ang-ora (Tindale 1974). In his overview of Australian Aboriginal tribal boundaries, Tindale (1974:199-201), places the Illawarra area within the territories of the Wodi Wodi tribe (or 'named group'). Tindale (1940:194-195) describes the Wodi Wodi named group as occupying the area north of the Shoalhaven River to Wollongong.

The areas inhabited by each of the groups are considered to be indicative only and would have changed through time and possibly due to circumstances (i.e. availability and distribution of resources). The type and quantity of interactions between different social groupings would have varied with seasons and resource availability. Interactions between the groups inhabiting the many resource zones of the Sydney Basin (coastal and inland) would have varied but been continuous. This is reflected in the relatively homogenous observable cultural features such as art motifs, technology and resource use (McDonald 1992).

Ethnographic evidence considered by Donlon and Sefton (1988, pp. 22-29) indicates high population mobility on the Woronora Plateau with frequent contact between the neighbouring Gandangarra, Cobrakall (Liverpool and Cabramatta) and Wodi Wodi (Illawarra). The traditional Wodi Wodi land extended from around Stanwell Park to the Shoalhaven River, and as far inland as Picton, Moss Vale and Marulan. The Wodi Wodi spoke the Dharawal language, however Dharawal (Tharawal) was not a word they had heard of or used themselves (Tindale 1974).

The first European explorers in the area were Bass and Flinders when they travelled to Port Kembla in 1796. Flinders wrote about 'Canoe River' in his journal, making reference to the Lake Illawarra entrance (Flinders 1796 in Organ 1990, p.11).

'This part is called Alowrie, by the natives, and is very low and sandy near the sides of the rivulet. About four miles up it, to the north-west, is the lagoon: and behind, stands a semi-circular range of hills, of which the highest is Hat Hill. The water in the lagoon was distinctly seen, and appeared to be several miles in circumference. The land around it is probable fertile, and the slopes of the back hills had certainly that appearance.'

Lake Illawarra also provided a rich variety of food resources. Allan Cunningham, Government Botanist, wrote in 1818 (Organ 1990):

...we came out upon the margin of the Lake, which is extensive, but very shoaly on its expanded surface. Pelicans, ducks and teal and some other aquatic birds were swimming, and in detached parties I observed natives of the Lake...in canoes, spearing fish, which is said to be abundant.

After the arrival of European settlers the movement of Aboriginal hunter-gatherers began to be increasingly restricted. European expansion was swift following the initial exploration by Bass and Flinders, and soon there had been considerable loss of land to agriculture. This led to violence and conflict between Europeans and Aboriginal people as both groups sought to compete for the same resources. At the same time diseases such as small pox were having a devastating effect on the Aboriginal population. Death, starvation and disease were some of the disrupting factors that led to a reorganisation of the social practices of Aboriginal communities after European contact.

The formation of new social groups and alliances were made as Aboriginal people sought to retain some semblance of their previous lifestyle. In 1820, approximately 3000 Aboriginal people were living in the Illawarra, but by 1899 their numbers had declined to only 33 people of non-mixed descent (Organ 1990). Today many Wodi Wodi and Tharawal people continue to live in the Illawarra.

3.2 Aboriginal heritage located in the study area

The archaeological assessment of the study area identified the following Aboriginal sites in the study area:

- 52-5-0523 Tallawarra Pipeline PAD 3
- 52-5-0613 TLPD AFT 7
- 52-5-0614 TLPD AFT 8
- 52-5-0615 TLPD AFT 9

The archaeological report attached in Appendix 6 provides details for Aboriginal sites identified during the archaeological assessment and shown on Ethno-historical information points out that the area was intensively occupied by people of the Dharawal language group. Tangible evidence of this occupation is reflected across the landscape by many recorded sites around Lake Illawarra, the majority of them shell middens and artefacts.

Previous archaeological work around Lake Illawarra has recognised archaeological and cultural landscape values of the locality. All of the previous studies provide a general overview of the Aboriginal archaeological site patterning and predictive behaviour around the lake. Results of previous archaeological assessments indicate that areas of archaeological potential will occur where disturbance has been limited in all the landforms around the lake, with shell middens and artefact sites most likely to be present in the area (Figure 5).

Due to the proximity of the study area to Lake Illawarra, it would have provided access to a range of terrestrial and aquatic flora and fauna species that could be utilised by Aboriginal groups in the region. Aquatic species in the area would have included a range of shellfish species that could be exploited, and this would result in the potential for shell midden sites in the study area. Several sites are recorded in the study area, including three isolated artefacts and a shell midden (Figure 4). This indicates that the study area was utilised by Aboriginal people in the past.

Figure 4.

A brief description of each site is provided below.

52-5-0523 Tallawarra Pipeline PAD 3

This PAD site was registered by the Wadi Wadi Coomaditchie following the completion of a field survey for a proposed pipeline easement. The PAD area is situated on a mid slope ridge on a moderate slope. It overlooks a small drainage feature to the south west and Duck Creek to the south.

52-5-0613 TLPD AFT 7

This site was recorded as a stone artefact scatter following test excavations conducted at the site. The excavations identified one chert core and one silcrete flake. The site was located on a drainage feature in an upper slope landform

52-5-0614 TLPD AFT 8

The site was recorded as a stone artefact scatter located on a moderate slope north of Yallah Bay Road. Two artefacts were identified during test excavations of the site, consisting of one chert flake and one chert flake fragment.

52-5-0615 TLPD AFT 9

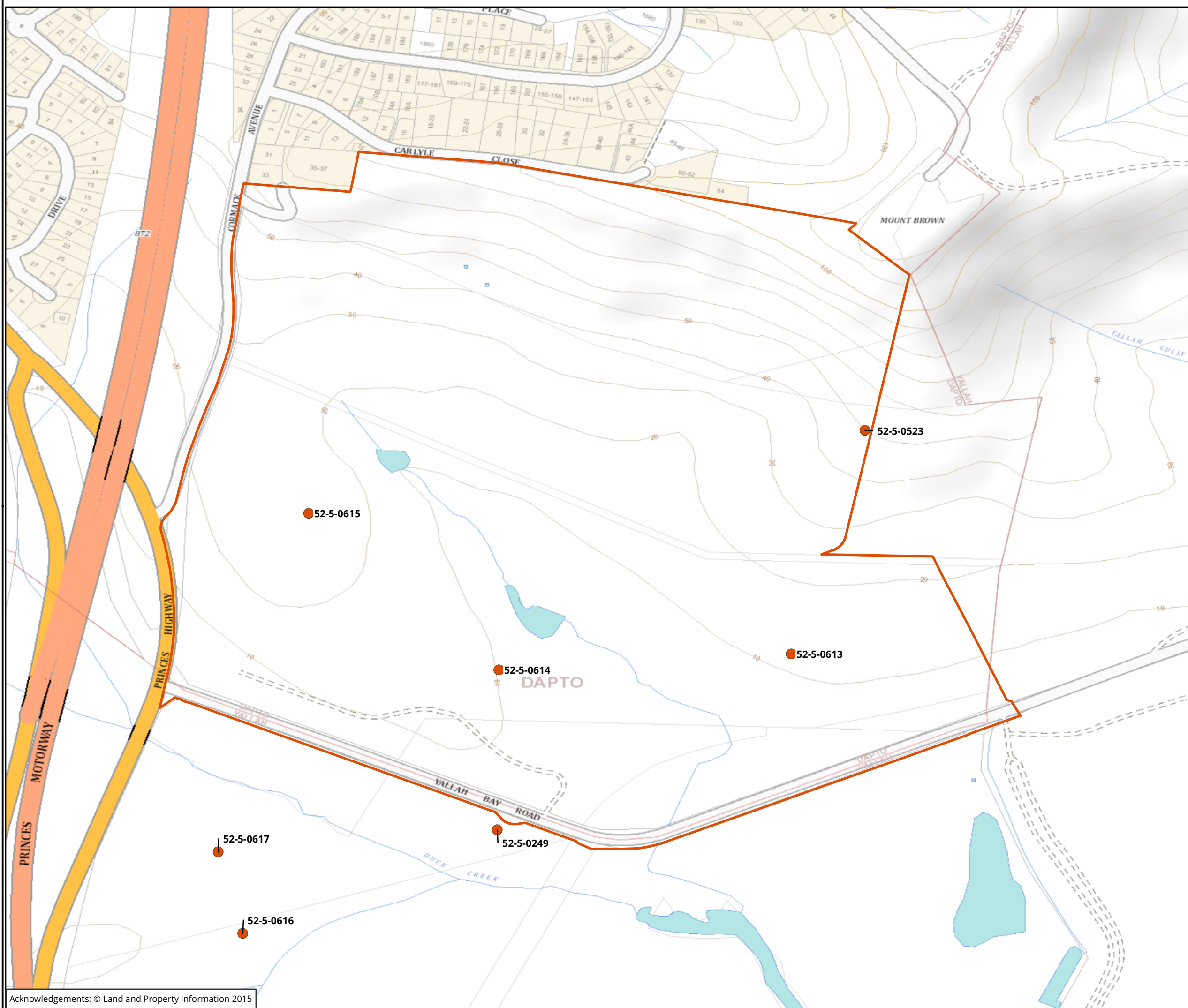
The site was recorded as an isolated artefact and was located on a spurline in a hillcrest landform. The artefact was uncovered during test excavations of the site and consisted of one piece of debitage. A fig tree associated with site TLPD AFT 9 (AHIMS 52-5-0615) was identified as being culturally important in previous assessments (Biosis 2010). The fig tree is of cultural value as they are the main trees used for either men's business or women's business, as meeting places, and are known to be used in the area as birthing trees.

3.3 Interpretation of past Aboriginal land use

Ethno-historical information points out that the area was intensively occupied by people of the Dharawal language group. Tangible evidence of this occupation is reflected across the landscape by many recorded sites around Lake Illawarra, the majority of them shell middens and artefacts.

Previous archaeological work around Lake Illawarra has recognised archaeological and cultural landscape values of the locality. All of the previous studies provide a general overview of the Aboriginal archaeological site patterning and predictive behaviour around the lake. Results of previous archaeological assessments indicate that areas of archaeological potential will occur where disturbance has been limited in all the landforms around the lake, with shell middens and artefact sites most likely to be present in the area (Figure 5).

Due to the proximity of the study area to Lake Illawarra, it would have provided access to a range of terrestrial and aquatic flora and fauna species that could be utilised by Aboriginal groups in the region. Aquatic species in the area would have included a range of shellfish species that could be exploited, and this would result in the potential for shell midden sites in the study area. Several sites are recorded in the study area, including three isolated artefacts and a shell midden (Figure 4). This indicates that the study area was utilised by Aboriginal people in the past.



Legend

- AHIMS Records
- ▭ Study area

Figure 4: Aboriginal sites located in the study area and vicinity

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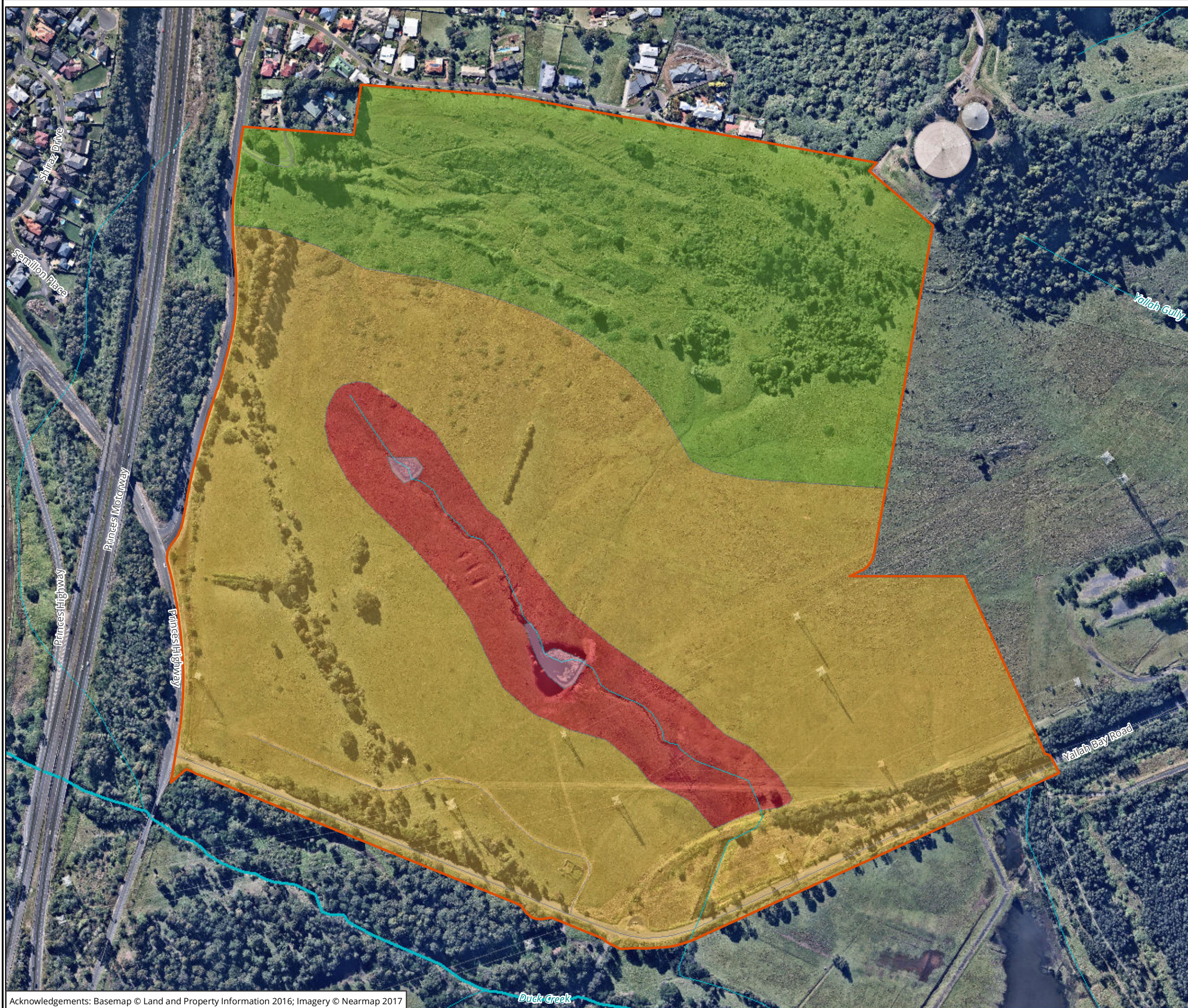
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Metres

Scale: 1:5,000 @ A3
Coordinate System: GCS GDA 1994



Biosis Pty Ltd
Ballarat, Brisbane, Canberra, Melbourne,
Sydney, Wangaratta & Wollongong

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Legend

Study area

Archaeological potential

High

Moderate

Low

Figure 5: Areas of archaeological potential

0 40 80 120 160 200
Metres

Scale: 1:4,000 @ A3
Coordinate System: GDA 1994 MGA Zone 56



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

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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

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.

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

4.2.1 Identification of relevant Aboriginal stakeholders

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

- Wollongong City Council.
- NSW Office of Environment and Water (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).
- South Coast Local Land Services.
- Illawarra Local Aboriginal Land Council (ILALC).

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

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. The National Native Title Tribunal did not respond to the request to find Aboriginal stakeholders. Both Wollongong City Council and South Coast Local Land Services recommended contacting OEH.

4.2.2 Public notice

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

- Illawarra Mercury (20 June 2017)

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.

4.2.3 Registration of Aboriginal parties

Aboriginal groups identified in Section 4.1.1 were sent a letter on 27 June 2017 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 14 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:

- Illawarra Local Aboriginal Land Council (ILALC)
- Warra Bingi Nunda Gurri
- Woronora Plateau Gundangara Elders Council
- Darug Land Observations
- Three Ducks Dreaming Surveying and Consulting
- The Wadi Wadi Coomaditchie Aboriginal Corporation
- Guunamaa Dreaming and Sites Surveying
- James Davis
- Goobah Development Pty Ltd (murrin Clan/Peoples)
- Murramarang (Murrin Clan/Peoples)
- Minnamunnung
- Duncan Falk Consultancy
- Cullendulla (Murrin Clan/Peoples)
- Biamanga (Murrin Clan/Peoples)

4.3 Stage 2: Presentation of information about the proposed project

On 28 August 2017 Biosis provided RAPs with details about the proposed development works (project information pack). Once the review period has closed this report will be updated with comments received and Biosis responses. A copy of the project information pack is provided in Appendix 3.

4.4 Stage 3: Gathering information about cultural significance

4.4.1 Archaeological assessment methodology information pack

On 28 August 2017 Biosis provided each RAP with a copy of the project methodology 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. Once the review period has closed this report will be updated with comments received and Biosis responses. A copy of the project methodology pack is provided in Appendix 4.

4.5 Stage 4: Review of draft Aboriginal cultural heritage assessment report - TBC

Following completion of the DRAFT Aboriginal cultural heritage assessment report, it was provided to RAPs on [DATE] for review and comment. RAPs were given 28 days to provide comments. Comments received by RAPs will be included below upon close of the 28 day review period. Comments on the draft report will be 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, 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 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 *Guide 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).
- 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. Table 4 below outlines areas identified as having Aboriginal cultural significance based on the previous Aboriginal consultation for the study area in 2010 (Biosis 2010).

Table 4 Areas of Aboriginal cultural sensitivity, identified through stakeholder consultation in Biosis (2010)

Defined Area of Aboriginal Cultural Sensitivity	Description of component area	Identified Cultural Values
Duck Creek	Easterly trending creek with fluvial deposits located on the southern and	It would have been used as an access way to the lake and for its resources.

Defined Area of Aboriginal Cultural Sensitivity	Description of component area	Identified Cultural Values
	northern banks of the creek.	
Fig Tree	SSE trending basal slope	Men's business or women's business, a meeting place, birthing tree
Lake Illawarra Foreshore	Open, sloping lake shores and floodplain / swamp land	The lake itself, the foreshore, the midden sites and its association with the birth of Queen Rosie.
Wollingurri Point	Open low slope towards Lake Illawarra	Large midden site situated on a point that extends out into the lake
Ridgeline Access – Mt Brown to the Lake	Steep to moderate slopes trending south east towards Lake Illawarra	Ridgeline - access way from Mt Brown to Lake Illawarra <ul style="list-style-type: none"> - camping - vista
Mount Brown	Steep to moderate slopes trending south east towards Lake Illawarra	Mt Brown - lookout

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

An archaeological scientific assessment was undertaken for the study area and is presented in detail as part of the attached Archaeological Report (Appendix 6).

5.5 Aesthetic values

The study area has experienced low levels of disturbance including grazing and tree clearing practices. Power lines associated with Tallawarra power station also run through the south of the study area. The landscape of the study area is closely linked with Aboriginal cultural values and provides a context for Aboriginal sites that gives a strong sense of place due to its proximity to Lake Illawarra and the drainage line passing through the study area. The Illawarra Aboriginal community strongly identifies with the landscape of the study area.

5.6 Statement of significance

5.6.1 Statement of significance for 52-5-0523

This PAD site was registered by the Wadi Wadi Coomaditchie following the completion of a field survey for a proposed pipeline easement in 2010. The PAD area is situated on a mid slope ridge on a moderate slope. It overlooks a small drainage feature to the south west and Duck Creek to the south. The Aboriginal community has indicated during previous consultation that the general area around Lake Illawarra has a high significance to the community, particularly to those who trace their ancestry to the Illawarra region. PAD sites represent a

common example of a site within the Illawarra region. However; archaeological testing has not been conducted at this site, therefore the site content and representativeness of the site cannot be adequately assessed. The site has no direct historical or aesthetic associations. This site has been assessed as having unknown scientific significance. The site displays low levels of disturbance and represents a common example of a site within the area. The site also has no direct historical or aesthetic associations and has a low scientific potential. The scientific significance of this site has been assessed as moderate (Table 5).

5.6.2 Statement of significance for 52-5-0613

This site was recorded as a stone artefact scatter following test excavations on which identified one chert core and one silcrete flake. The site was located on a drainage feature in an upper slope landform. The Aboriginal community has indicated during previous consultation that the general area around Lake Illawarra has a high significance to the community, particularly to those who trace their ancestry to the Illawarra region. The site displays low levels of disturbance and represents a common example of a site within the area. The site has no direct historical or aesthetic associations. The scientific significance of this site has been assessed as moderate (Table 5).

5.6.3 Statement of significance for 52-5-0614

Site 52-5-0614 was recorded as a stone artefact scatter located on a moderate slope north of Yallah Bay Road. Two artefacts were identified during test excavations of the site, consisting of one chert flake and one chert flake fragment. The Aboriginal community has indicated during previous consultation that the general area around Lake Illawarra has a high significance to the community, particularly to those who trace their ancestry to the Illawarra region. The site displays low levels of disturbance and represents a common example of a site within the area. The site has no direct historical or aesthetic associations. The scientific significance of this site has been assessed as moderate (Table 5).

5.6.4 Statement of significance for 52-5-0615

The site was recorded as an isolated artefact and was located on a spurline in a hillcrest landform. The artefact was uncovered during test excavations of the site and one piece of debitage was identified. A fig tree associated with TLPD AFT 9 (52-5-0615) was identified as being culturally important in previous assessments (Biosis 2010). The fig tree is of cultural value as they are the main trees used for either men's business or women's business, as meeting places, and are known to be used in the area as birthing trees. The site displays low levels of disturbance and represents a common example of a site within the area. The site has no direct historical or aesthetic associations. The Aboriginal community has indicated during consultation that the general area around Lake Illawarra has a high significance to the community, particularly to those who trace their ancestry to the Illawarra region. The scientific significance of this site has been assessed as moderate (Table 5).

Table 5 Significance assessment criteria

Site name	Criteria	Ranking
Tallawarra Pipeline PAD 3 52-5-0523	Cultural – discussions with the local Aboriginal communities reflect that the site is high in value due to its proximity to Lake Illawarra.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site represents a potential archaeological deposit and so possesses some archaeological values.	Unknown

Site name	Criteria	Ranking
	Aesthetic – Located on the western side of a large gully in the north-western corner of the Study Area. The site is close to a series of powerlines and has low aesthetic value as a result	Low
TLPD AFT 7 52-5-0613	Cultural – discussions with the local Aboriginal communities reflect that the site is high in value due to its proximity to Lake Illawarra.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site contains one chert and one silcrete stone artefact and is a common site type in the region. The site displays low levels of disturbance. It has moderate scientific value.	Moderate
	Aesthetic – located on the eastern side of a large gully in the north-western corner of the Study Area. The site is close to a series of powerlines and has low aesthetic value as a result	Low
TLPD AFT 8 52-5-0614	Cultural – discussions with the local Aboriginal communities reflect that the site is high in value due to its proximity to Lake Illawarra.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site contains two chert stone artefact and is a common site type in the region. The site displays low levels of disturbance. It has moderate scientific value.	Moderate
	Aesthetic – Located on the western side of a large gully in the north-western corner of the study area. The site is close to a series of powerlines and has low aesthetic value as a result	Low
TLPD AFT 9 52-5-0615	Cultural – discussions with the local Aboriginal communities reflect that the site is high in value due to its proximity to Lake Illawarra. A fig tree associated with TLPD AFT 9 (52-5-0615) was identified as being culturally important in previous assessments (Biosis 2010). The fig tree is of cultural value as they are the main trees used for either men's business or women's business, as meeting places, and are known to be used in the area as birthing trees.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site contains one piece of debitage. Stone artefacts are a common site type in the region. The site displays low levels of disturbance. It has moderate scientific value.	Moderate
	Aesthetic – located on the western boundary of the Study Area approximately 100m east of Cormack Avenue. The site is close to a series of powerlines and has low aesthetic value as a result	Low

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 values. The resultant statement of significance has been constructed for the study area based on the significance ranking criteria assessed in Table 5.

6 Proposed development limitations & mitigation measures

As previously outlined, Cardno on behalf of Bridgehill is proposing to submit a development application for the Tallawarra Lands Central Precinct and to modify the existing concept approval for the Central Precinct (MP 09_0131 MOD 1) to allow an increased residential lot yield.

The proposed works will include earthworks, the construction of new residential dwellings and associated infrastructure including roads, underground piping and cabling, and associated earthworks.

The proposed development will involve the following activities that have the potential to impact on Aboriginal archaeological sites or objects:

- earthworks
- subdivision
- new housing stock
- public open space areas
- new recreation facilities
- environmental management and conservation areas and riparian corridors
- new internal roads
- new pedestrian and cycle pathways
- landscaping
- power station buffer areas
- installation of services (water, gas, power)

Within the study area, there are four recorded Aboriginal sites that may be subject to harm. It is expected that the potential of harm to Aboriginal archaeological sites Tallawarra Pipeline PAD 3 (52-5-0523), TLPD AFT 7 (52-5-0613), TLPD AFT 8 (52-5-0614), and TLPD AFT 9 (52-5-0615) from the proposed development will be direct, with a total loss of value (Figure 6).

A summary of the potential impacts of the proposed works on known Aboriginal sites within the study area is provided in Table 6.

Table 6 Summary of potential archaeological impact

AHIMS site no.	Site name	Significance	Type of harm	Degree of harm	Consequence of harm
52-5-0523	Tallawarra Pipeline PAD 3	Moderate	Direct	Total	Total loss of value
52-5-0613	TLPD AFT 7	Low	Direct	Total	Total loss of value
52-5-0614	TLPD AFT 8	Low	Direct	Total	Total loss of value
52-5-0615	TLPD AFT 9	Low	Direct	Total	Total loss of value

6.1 Avoiding harm to Aboriginal heritage

Aboriginal sites Tallawarra Pipeline PAD 3 (52-5-0523), TLPD AFT 7 (52-5-0613), TLPD AFT 8 (52-5-0614), and TLPD AFT 9 (52-5-0615) are located within the development footprint and impacts to these sites cannot be avoided.

Strategies to minimise harm to Aboriginal heritage in or adjacent to the study area are discussed below.

6.2 Management and mitigation measures

Ideally, heritage management involves conservation of sites through the preservation and conservation of fabric and context within a framework of *“doing as much as necessary, as little as possible”* (Marquis-Kyle and Walker 1994: 13). In cases where conservation is not practical, several options for management are available. For sites, management often involves the salvage of features or artefacts, retrieval of information through excavation or collection (especially where impact cannot be avoided) and interpretation.

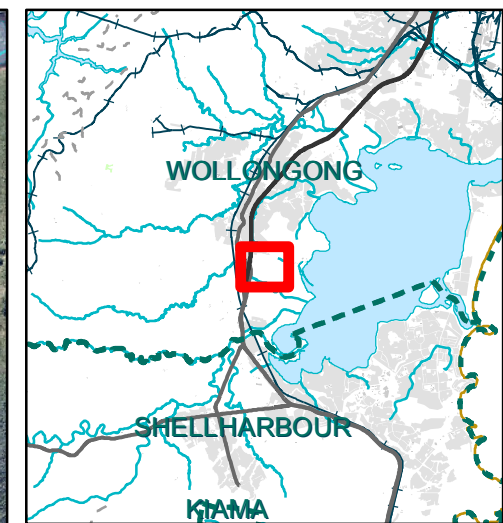
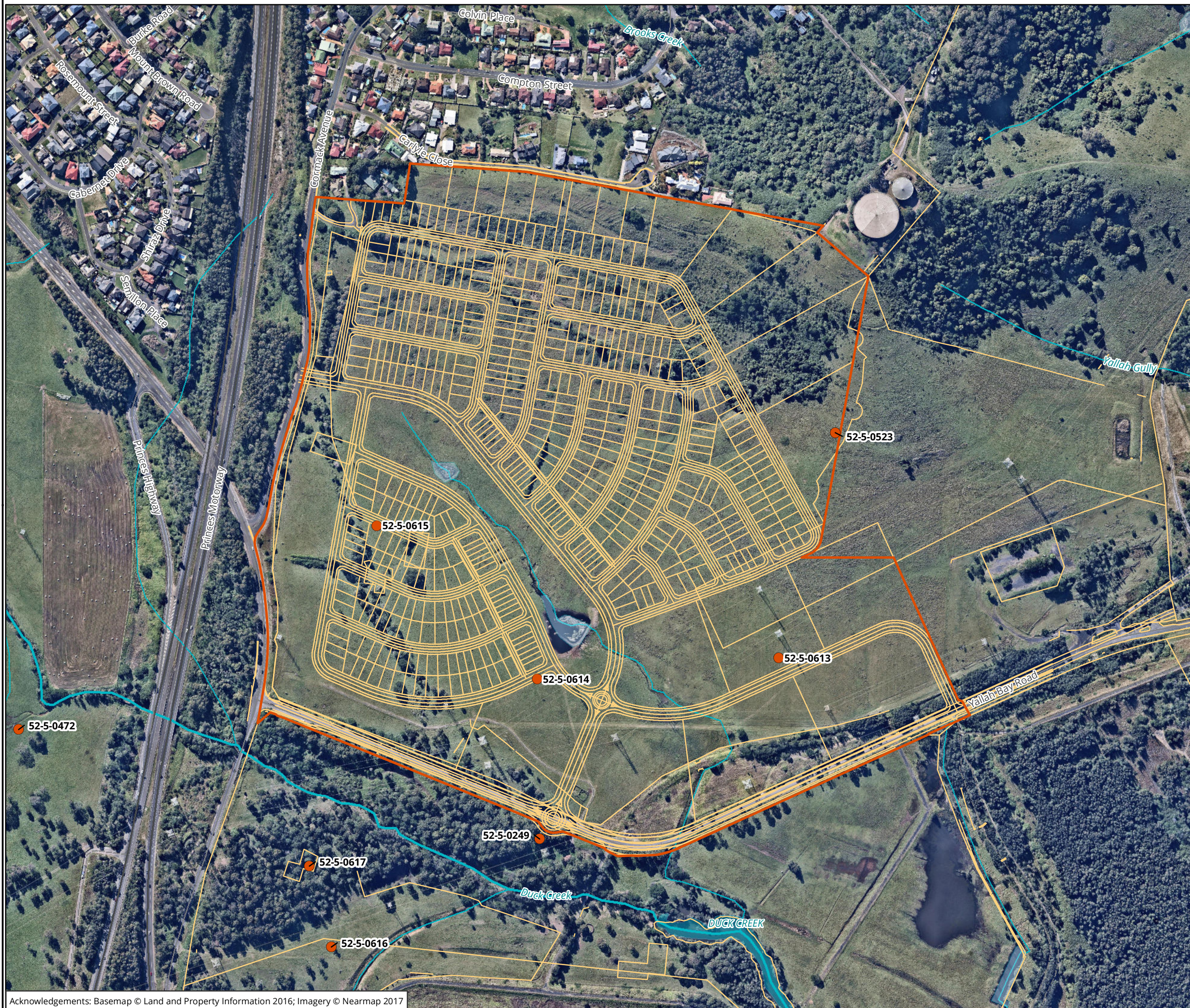
Avoidance of impact to archaeological and cultural heritage sites through design of the development is the primary mitigation and management strategy, and should be implemented where practicable.

Tallawarra Pipeline PAD 3 (52-5-0523) has been assessed as having unknown scientific significance. The development cannot avoid impacts to Tallawarra Pipeline PAD 3 (52-5-0523), further archaeological assessment in the form of subsurface investigations (archaeological test excavations) will be required in order to mitigate any development impacts (Figure 6).

TLPD AFT 7 (52-5-0613), TLPD AFT 8 (52-5-0614), and TLPD AFT 9 (52-5-0615) have been assessed as having moderate scientific significance. All four sites are currently located within the proposed development area and impacts on them cannot be avoided (Figure 6).

Prior assessment by Biosis (2010) identified areas of high and moderate potential within the study area and, even though a limited program of test excavations was conducted, further testing is recommended to fully identify the nature and extent of Aboriginal occupation (Figure 5).

Furthermore, the conservation and integration of the Fig Tree should be incorporated into modification of the concept approval.



Legend




-  Study area
-  AHIMS Records
-  Proposed development

Figure 6: Proposed development showing AHIMS sites

0 50 100 150 200 250
Metres

Scale: 1:5,000 @ A3
Coordinate System: GDA 1994 MGA Zone 56



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

Matter: 24090
Date: 23 August 2017,
Checked by: RAM, Drawn by: LH, Last edited by: lharley
Location: P:\24000s\24090\Mapping\
24090_AR_E3_PropDev

7 Recommendations

The recommendations below respond specifically to the wishes of the registered Aboriginal parties. 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: Further archaeological assessment is required in areas of moderate and high archaeological potential

Areas identified as having high and moderate archaeological potential should be avoided wherever possible (Figure 5). If impact to these areas cannot be avoided subsurface investigations (test excavations) will be required prior to the commencement of works as a condition of the DA or concept approval. Test excavations should be conducted in accordance with the *Code of Practice for archaeological investigation for Aboriginal objects in NSW* (DECCW 2010b) and *Aboriginal cultural heritage consultation requirements for proponents in New South Wales* (DECCW 2010a).

Recommendation 2: Further archaeological assessment is required at Tallawarra Pipeline PAD 3 (AHIMS 52-5-0523)

If impacts to Tallawarra Pipeline PAD 3 (AHIMS 52-5-0523) cannot be avoided, subsurface investigations (test excavations) will be required prior to the commencement of works as a condition of the DA or concept approval. Test excavations should be conducted in accordance with the *Code of Practice for archaeological investigation for Aboriginal objects in NSW* (DECCW 2010b) and *Aboriginal cultural heritage consultation requirements for proponents in New South Wales* (DECCW 2010a).

Recommendation 3: Conservation of Fig Tree associated with TLPD AFT 9 (AHIMS 52-5-0615)

If possible the Fig Tree associated with TLPD AFT 9 (AHIMS 52-5-0615) should be conserved and incorporated into the modification of the concept approval.

Recommendation 4: No further archaeological assessment is required in areas of low archaeological potential

No further archaeological work is required in areas identified as having low archaeological potential except in the event that unexpected Aboriginal sites, objects or human remains are unearthed during development (refer to Recommendations 9 and 10 below).

Recommendation 5: Fencing of AHIMS sites

AHIMS sites or PAD areas located within 30 metres of the area of proposed works should be clearly marked and fenced in order to avoid unintentional impacts during construction.

Recommendation 6: Aboriginal cultural heritage induction for workers and contractors

The locations of each AHIMS site and PAD area located within the Tallawarra Lands development should be clearly mapped. Workers and contractors working at, or visiting the site should be made aware of the location of all AHIMS sites and PAD areas within the Tallawarra Lands development through an Aboriginal cultural heritage induction.

Recommendation 7: Application for an Aboriginal heritage impact permit (AHIP)

Should the Development Application (DA) be approved, it is recommended that Cardno apply to OEH for an AHIP to destroy the listed Aboriginal sites within the study area which are currently protected under the NSW *National Parks and Wildlife Act 1974*. **The AHIP should be for a term of ten (10) years.** The sites that will be impacted by the proposed works are as follows

- TLPD AFT 7 (AHIMS 52-5-0613)
- TLPD AFT 8 (AHIMS 52-5-0614)
- TLPD AFT 9 (AHIMS 52-5-0615)
- Tallawarra Pipeline PAD 3 (AHIMS 52-5-0523)

For information about AHIPs and their preparation, see below.

Advice preparing AHIPs

An AHIP is required for any activities likely to have an impact on Aboriginal objects or Places or cause land to be disturbed for the purposes of discovering an Aboriginal object. The Office of Environment and Heritage (OEH) issues AHIPs under Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act).

AHIPs should be prepared by a qualified archaeologist and lodged with the OEH. Once the application is lodged processing time can take between 8-12 weeks. It should be noted that there will be an application fee levied by the OEH for the processing of AHIPs, which is dependent on the estimated total cost of the development project.

Recommendation 8: Cardno must abide by the conditions of the AHIP once obtained from OEH

The AHIP will be issued with conditions pertaining to the management and mitigation of Aboriginal heritage sites within the study area. These conditions will be outlined in Schedules A, B and C as follows:

- Schedule A: Aboriginal objects which must not be harmed.
- Schedule B: Aboriginal objects that may be harmed through certain actions.
- Schedule C: Aboriginal objects which may be harmed through the proposed works.

Cardno must undertake all further works to ensure the condition of the AHIP are met before construction begins.

Recommendation 9: Discovery of Unanticipated Aboriginal Objects

All Aboriginal objects and Places are protected under the *NSW National Parks and Wildlife Act 1974*. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the OEH. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object, the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

Recommendation 10: Discovery of Aboriginal Ancestral Remains

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

1. Immediately cease all work at that location and not further move or disturb the remains

2. Notify the NSW Police and OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
3. Not recommence work at that location unless authorised in writing by to the OEH.

Recommendation 11: Continued consultation with the registered Aboriginal stakeholders

As per the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010a), 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 sites within the study area throughout the life of the project.

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Appendices

Appendix 1 Consultation log

A1.1 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
Wollongong City Council (WCC)	15/06/2017 - Letter	29/06/2017 - email	Encouraged to refer to OEH List
NSW Office of Environment and Water (OEH)	15/06/2017 - Letter	26/08/2017 - email	Provided list of Aboriginal stakeholders
NSW Native Title Services Corporation Limited (NTSCORP Limited)	15/06/2017 - Letter	N/A	
Office of the Registrar, Aboriginal Land Rights Act 1983 of Aboriginal Owners	15/06/2017 - Letter	26/08/2017 - email	Indicated there were no Aboriginal owners and to contact ILALC
National Native Title Tribunal (NNTT)	15/06/2017 - Letter	N/A	
South East Local Land Services	15/06/2017 - Letter	23/06/2017- letter	Recommended to contact OEH
Illawarra Local Aboriginal Land Council (ILALC)	15/06/2017 - Letter	N/A	

Step 2- Public advertisement

The public notice was published in the Illawarra Mercury on the 20 June 2017. A copy of the advertisement is provided in Appendix 2.

Step 3- Registration of interest.

The registration period ran from the 27 June 2017 to the 11 June 2017. 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
Badu (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Bellambi Indigenous Corporation Gandangarra Traditional Owners	27/06/2017 - email	N/A	N/A

Organisation contacted	Date and type of contact	Date and type of response	Response details
Biamanga (Murrin Clan/Peoples)	27/06/2017 - email	10/07/2017 - email	Registered interest
Bilinga (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Bilinga Cultural Heritage Technical Services (Mirramajah)	27/06/2017 - email	N/A	N/A
Coomaditchie United Aboriginal Corporation	27/06/2017 - email	N/A	N/A
Cullendulla (Murrin Clan/Peoples)	27/06/2017 - email	10/07/2017 - email	Registered interest
Darug Land Observations	27/06/2017 - email	21/06/2017 - email	Registered interest
Dharug (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Duncan Falk Consultancy	27/06/2017 - email	10/07/2017 - email	Registered interest
Gadhu Dreaming	27/06/2017 - email	N/A	N/A
Garrara Aboriginal Corporation	27/06/2017 - email	N/A	N/A
Goobah Development Pty Ltd (Murrin Clan/Peoples)	27/06/2017 - email	10/07/2017 - email	Registered interest
Gundungurra Tribal Technical Services	27/06/2017 - email	N/A	N/A
Gunyu (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Gunyu Cultural Heritage Technical Services (Mirramajah)	27/06/2017 - email	N/A	N/A
Guunamaa Dreaming Sites and Surveying	27/06/2017 - letter	27/06/2017 - email	Registered interest
Illawarra Aboriginal Corporation	27/06/2017 - email	N/A	N/A
Illawarra Local Aboriginal Land Council	27/06/2017 - email	N/A	N/A
Jerringong (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Karrial (Murrin Clan/Peoples)	27/06/2017 - letter	N/A	N/A
Korewal Elouera Jerrungurah Tribal Elders Council	27/06/2017 - letter	N/A	N/A

Organisation contacted	Date and type of contact	Date and type of response	Response details
Kulila Site Consultants & Koori Site Management	27/06/2017 - letter	N/A	N/A
La Perouse Botany Bay Corporation	27/06/2017 - email	N/A	N/A
Minnamunnung	27/06/2017 - email	10/07/2017 - email	Registered interest
Munyunga (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Munyunga Cultural Heritage Technical Services (Mirramajah)	27/06/2017 - email	N/A	N/A
Murramarang (Murrin Clan/Peoples)	27/06/2017 - email	10/07/2017 - email	Registered interest
Murrumbul (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Murrumbul Cultural Heritage Technical Services (Mirramajah)	27/06/2017 - letter	N/A	N/A
NIAC	27/06/2017 - email	N/A	N/A
Nundagurri (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Pemulwuy (Murrin Clan/Peoples)	27/06/2017 - letter	N/A	N/A
South West Rocks Corporation	27/06/2017 - letter	N/A	N/A
The Wodi Wodi Elders Corporation	27/06/2017 - email	N/A	N/A
Three Ducks Dreaming Surveying and Consulting	27/06/2017 - email	27/06/2017 - email	Registered interest
Walbunja (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Walgalu (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Warra Bingi Nunda Gurri	27/06/2017 - email	21/06/2017 - email	Registered interest
Wingikara Cultural Heritage Technical Services (Mirramajah)	27/06/2017 - email	N/A	N/A
Gary Caines	27/06/2017 - email	N/A	N/A
James Davis	27/06/2017 - letter	30/06/2017 - email	Registered interest

Organisation contacted	Date and type of contact	Date and type of response	Response details
Ken Foster	27/06/2017 - letter	N/A	N/A
Norman Simms	27/06/2017 - email	N/A	N/A
Woronora Plateau Gundungara Elders Council	27/06/2017 - email	27/06/2017 - email	Registered interest
Wullung (Murrin Clan/Peoples)	27/06/2017 - email	N/A	N/A
Yerramurra (Murrin Clan/Peoples)	27/06/2017 - letter	N/A	N/A
The Wadi Wadi Coomaditchie Aboriginal Corporation	27/06/2017 - email	28/06/2017 - verbal	Registered interest
Tungai Tonghi	27/06/2017 - email	N/A	N/A

A1.2 Stage 2 – Presentation of information about the proposed project

Step 1- Provision of project information pack.

This information is currently out for review.

A1.3 Stage 3 – Gathering information about cultural significance

Step 1- Provision of project methodology pack and consultation meeting.

This information is currently out for review.

Step 2- Field survey

This section will be completed once comments are received from RAPs.

A1.4 Stage 4 – Review of draft report

This section will be completed once comments are received from RAPs.

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

Details will be inserted after draft stage.

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

Details will be inserted after draft stage.

Appendix 4 Stage 3: Gathering information about cultural significance

Details will be inserted after draft stage.

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

Details will be inserted after draft stage.

Appendix 6 Archaeological report

Details will be inserted after draft stage.