

131 WOLLOMBI ROAD, FARLEY, NSW

# ABORIGINAL DUE DILIGENCE ASSESSMENT

Report to The Bathla Group

December 2022





## EXECUTIVE SUMMARY

Apex Archaeology has been engaged to assist The Bathla Group in the Aboriginal due diligence assessment of 131 Wollombi Road, Farley, NSW, in order to assess the Aboriginal archaeological values of the study area. This assessment has been prepared to support a Development Application (DA) for the site.

This report has been produced in accordance with the 2010 *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (the Due Diligence Code of Practice).

The study area is located within the suburb of Farley and is legally known as Lot 1 DP 1049391. The study area is located 32 km north west of Newcastle, within the Maitland Local Government Area (LGA). The study area comprises approximately 1.6ha.

A site visit was conducted in August of 2022. No previously registered archaeological sites were located within the study area. No newly identified archaeological material was identified during the survey.

Ground surface visibility (GSV) was low throughout the study area. GSV was rated at <10% overall. No raw material sources were identified within the study area.

Ground disturbance was moderate within portions of the study area due to historic vegetation clearance, agriculture and subsequent residential development and landscaping. Disturbance was less noticeable within the southern portion of the study area. However, based on the assessment in the field, this area was not considered to have subsurface potential for Aboriginal cultural deposits to be present.

The level of disturbance within the site from prior land clearing activities and current land use is evident throughout much of the study area. Landscape modification has reduced the potential for any intact archaeological sub-surface deposits within the majority of the study area to nil; along with the general slope of the remainder of the site not being attractive for Aboriginal occupation in the past.

It is recommended that:

- No further Aboriginal archaeological assessment is required prior to the commencement of works as described in this report.
- This due diligence assessment must be kept by the Bathla Group so that it can be presented, if needed, as a defence from prosecution under Section 86(2) of the *National Parks and Wildlife Act 1974*.
- The results of this assessment fulfil the requirement for archaeological assessment in accordance with the OEH 2010 *Guide to Investigation, assessing and reporting on Aboriginal cultural heritage in NSW* and the *Due*



*Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (Code of Practice). Works may proceed with caution.

- The proposed works must be contained to the area assessed during this archaeological assessment, as shown on Figure 1. If the proposed location is amended, further archaeological assessment may be necessary to determine if the proposed works will impact any Aboriginal objects or archaeological deposits.
- Should unanticipated archaeological material be encountered during site works, all work must cease and an archaeologist contacted to make an assessment of the find. Further archaeological assessment and Aboriginal community consultation may be required prior to the recommencement of works. Any objects confirmed to be Aboriginal in origin must be reported to Heritage NSW.



Apex Archaeology would like to acknowledge the Aboriginal people who are the traditional custodians of the land in which this project is located. Apex Archaeology would also like to pay respect to Elders both past and present.

## DOCUMENT CONTROL

The following register documents the development and issue of the document entitled '131 Wollombi Road, Farley, NSW – Aboriginal Due Diligence Assessment', prepared by Apex Archaeology in accordance with its quality management system.

Revision	Prepared by	Reviewed by	Comment	Issue Date
1 – Draft	Leigh Bate	Jenni Bate	Issue for client review	17 August 2022
2 – Final	Leigh Bate	Neelam Kaushal	Final issued to client	11 December 2022



## GLOSSARY OF TERMS

<b>Aboriginal Object</b>	An object relating to the Aboriginal habitation of NSW (as defined in the NPW Act), which may comprise a deposit, object or material evidence, including Aboriginal human remains.
<b>AHIMS</b>	Aboriginal Heritage Information Management System maintained by Heritage NSW, detailing known and registered Aboriginal archaeological sites within NSW
<b>AHIP</b>	Aboriginal Heritage Impact Permit
<b>BP</b>	Before Present, defined as before 1 January 1950.
<b>Code of Practice</b>	The DECCW September 2010 <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i>
<b>Consultation</b>	Aboriginal community consultation in accordance with the DECCW April 2010 <i>Aboriginal cultural heritage consultation requirements for proponents 2010</i> . Consultation is not a required step in a due diligence assessment; however, it is strongly encouraged to consult with the relevant Local Aboriginal Land Council and to determine if there are any Aboriginal owners, registered native title claimants or holders, or any registered Indigenous Land Use Agreements in place for the subject land
<b>DA</b>	Development Application
<b>DCP</b>	Development Control Plan
<b>DECCW</b>	The Department of Environment, Climate Change and Water – now Heritage NSW
<b>Disturbed Land</b>	If land has been subject to previous human activity which has changed the land's surface and are clear and observable, then that land is considered to be disturbed
<b>Due Diligence</b>	Taking reasonable and practical steps to determine the potential for an activity to harm Aboriginal objects under the <i>National Parks and Wildlife Act 1974</i> and whether an application for an AHIP is required prior to commencement of any site works, and determining the steps to be taken to avoid harm
<b>Due Diligence Code of Practice</b>	The DECCW Sept 2010 <i>Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales</i>
<b>GCP</b>	Growth Centres Precinct
<b>GIS</b>	Geographical Information Systems
<b>GSV</b>	Ground Surface Visibility
<b>Harm</b>	To destroy, deface or damage an Aboriginal object; to move an object from land on which it is situated, or to cause or permit an object to be harmed
<b>Heritage NSW</b>	Heritage NSW in the Department of Premier and Cabinet – responsible for heritage matters in NSW
<b>LALC</b>	Local Aboriginal Land Council
<b>LGA</b>	Local Government Area
<b>NPW Act</b>	NSW <i>National Parks and Wildlife Act 1974</i>
<b>OEH</b>	The Office of Environment and Heritage of the NSW Department of Premier and Cabinet – now Heritage NSW
<b>RAPs</b>	Registered Aboriginal Parties



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## 1.0 INTRODUCTION

Apex Archaeology has been engaged to assist The Bathla Group in the Aboriginal due diligence assessment of 131 Wollombi Road, Farley, NSW (Figure 1), in order to assess the Aboriginal archaeological values of the study area. This assessment has been prepared to support a Development Application (DA) for the site.

This report has been produced in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (the Due Diligence Code of Practice).

### 1.1 STUDY AREA

The study area is located within the suburb of Farley and is legally known as Lot 1 DP 1049391. The study area is located 32 km north west of Newcastle, within the Maitland Local Government Area (LGA). The study area comprises approximately 1.6ha.

### 1.2 INVESTIGATORS AND CONTRIBUTORS

This report has been prepared by Leigh Bate, Director and Archaeologist with Apex Archaeology, and Jenni Bate, Director and Archaeologist with Apex Archaeology. Both have over fifteen years of consulting experience within NSW.

Name	Role	Qualifications
Leigh Bate	Primary Report Author, GIS, Field inspection	B.Archaeology; Grad. Dip. Arch; Dip. GIS
Jenni Bate	Project Manager, Review	B. Archaeology; Grad. Dip. CHM

### 1.3 STATUTORY CONTEXT

Heritage in Australia, including both Aboriginal and non-Aboriginal heritage, is protected and managed under several different Acts. The following section presents a summary of relevant Acts which provide protection to cultural heritage within NSW.

#### 1.3.1 COMMONWEALTH NATIVE TITLE ACT 1993

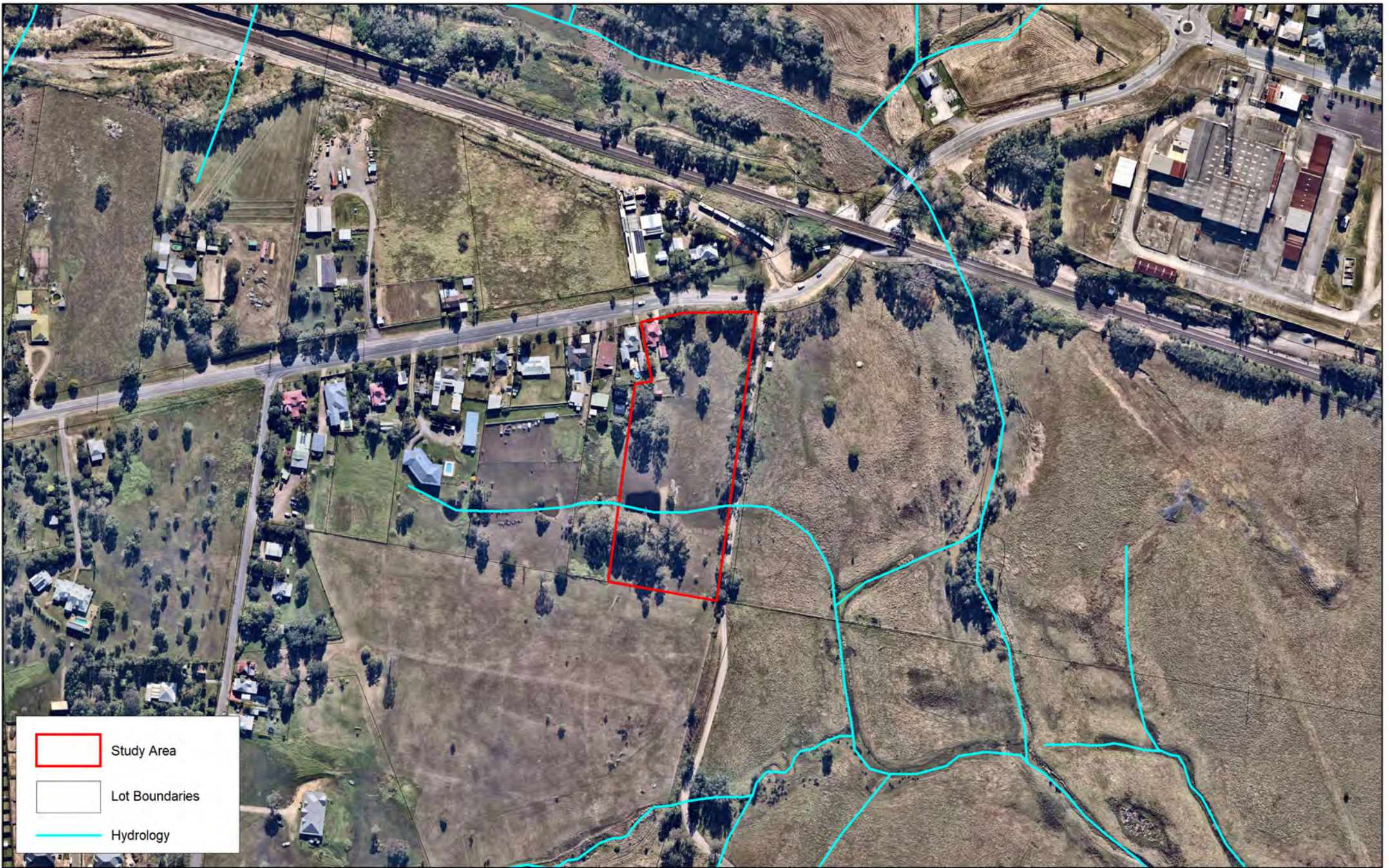
The *Native Title Act 1993*, as amended, provides protection and recognition for native title. Native title recognises the traditional rights of Aboriginal and Torres Strait Islanders to land and waters.


The National Native Title Tribunal (NNTT) was established to mediate native title claims made under this Act. Three registers are maintained by the NNTT, as follows:


- National Native Title Register
- Register of Native Title Claims
- Register of Indigenous Land Use Agreements


A search of the above registers did not identify any applicable Native Title claims, registrations, or applications, for the study area or surrounds.







 Study Area

 Lot Boundaries

 Hydrology

 <p>PO Box 236 NOWRA NEW SOUTH WALES 2541</p>	<p>0 150 300</p>  <p>metres</p>	<p>Projection: MGA Zone 56 (GDA 94) Base Map: NearMaps 2021 Image Date: 07/08/2021 Final - Version 1</p>	<p>Figure 1: General location of the study area in its local context.</p>	
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### 1.3.2 NSW NATIONAL PARKS AND WILDLIFE ACT 1974

Protection for Aboriginal heritage in NSW is provided primarily under the *National Parks and Wildlife Act 1974* (NPW Act). Although cultural heritage is protected by other Acts, the NPW Act is the relevant Act for undertaking due diligence assessments. Protection for Aboriginal sites, places and objects is overseen by Heritage NSW, of the Department of Premier and Cabinet.

Changes to the NPW Act with the adoption of the *NPW Amendment (Aboriginal Objects and Places) Regulation 2010* in October 2010 led to the introduction of new offences regarding causing harm to Aboriginal objects or declared Aboriginal places. These offences include destruction, defacement or movement of an Aboriginal object or place. Other changes to the NPW Act include:

- Increased penalties for offences relating to Aboriginal heritage for individuals and companies who do not comply with the legislation;
- Introduction of the strict liability offences, meaning companies or individuals cannot claim 'no knowledge' if harm is caused to Aboriginal objects or places; and
- Changes to the permitting process for AHIPs – preliminary archaeological excavations can be undertaken without the need for an AHIP, providing the excavations follow the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*.

A strict liability offence was introduced, meaning a person who destroys, defaces or moves an Aboriginal object without an Aboriginal Heritage Impact Permit (AHIP) is guilty of an offence, whether they knew it was an Aboriginal object or not. Exercising due diligence (as described in Section 1.4) provides a defence against the strict liability offence.

### 1.3.3 NSW NATIONAL PARKS AND WILDLIFE REGULATION 2019

Part 5, Division 2 of the *National Parks and Wildlife Regulation 2019* addresses Aboriginal objects and places in relation to the NPW Act 1974, and outlines how compliance with relevant codes of practice can be met, including with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. Clause 57 states:

*For the purposes of section 87(3) of the Act, compliance with any of the following codes of practice and documents (when undertaking an activity to which the code of document applies) is taken for the purposes of section (87(2) of the Act to constitute due diligence in determining whether the act or omission constituting the alleged offence would harm an Aboriginal object.*

Clause 58(1) outlines the defence of low impact acts or omissions to the offence of harming Aboriginal objects, which includes maintenance works on existing roads and fire trails, farming and land management work, grazing of animals, activities on land



that has been disturbed that is exempt or complying development, mining exploration work, removal of vegetation (aside from Aboriginal culturally modified trees), seismic surveying or groundwater monitoring bores on disturbed ground, environmental rehabilitation work (aside from erosion control or soil conservation works such as contour banks) or geological mapping, surface geophysical surveys, or sub-surface geophysical surveys.

Clause 58(4) outlines the definition of 'disturbed land', as land that "has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable".

'Disturbance' is further defined in a note to the above clause as follows:

*Examples of activities that may have disturbed land include the following—*

- (a) soil ploughing,*
- (b) construction of rural infrastructure (such as dams and fences),*
- (c) construction of roads, trails and tracks (including fire trails and tracks and walking tracks),*
- (d) clearing of vegetation,*
- (e) construction of buildings and the erection of other structures,*
- (f) construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure),*
- (g) substantial grazing involving the construction of rural infrastructure,*
- (h) construction of earthworks associated with anything referred to in paragraphs (a)–(g).*

## **1.4 NSW DUE DILIGENCE CODE OF PRACTICE**

The *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (Code of Practice) was introduced in September 2010. It outlines a method to undertake 'reasonable and practical' steps to determine whether a proposed activity has the potential to harm Aboriginal objects within the subject area, and thereby determine whether an application for an Aboriginal Heritage Impact Permit (AHIP) is required. When due diligence has been correctly exercised, it provides a defence against prosecution under the NPW Act under the strict liability clause if Aboriginal objects are unknowingly harmed without an AHIP.

The Code of Practice provides the 'reasonable and practicable' steps to be followed when determining the potential impact of a proposed activity on Aboriginal objects. Due diligence has been defined by Heritage NSW as "taking reasonable and practical steps to determine whether a person's actions will harm an Aboriginal object and, if so, what measures can be taken to avoid that harm" (DECCW 2010:18).



These steps include:

- Identification of whether Aboriginal objects are, or are likely to be, present within the subject area, through completing a search of the Aboriginal Heritage Information Management System (AHIMS);
- Determine whether the proposed activity is likely to cause harm to any Aboriginal objects; and
- Determine the requirement for an AHIP.

Should the conclusion of a due diligence assessment be that an AHIP is required, further assessment must be undertaken, with reference to the following guidelines:

- DECCW, April 2010, *Aboriginal cultural heritage consultation requirements for proponents 2010*. Part 6 National Parks and Wildlife Act 1974;
- DECCW, Sept 2010, *Code of Practice for Archaeological Investigation of Aboriginal Objects In New South Wales*;
- OEH, April 2011, *Guide to Investigation, assessing and reporting on Aboriginal cultural heritage in NSW*; and
- OEH, May 2011, *Applying for an Aboriginal Heritage Impact Permit: Guide for Applicants*.

## **1.5 MAITLAND LEP 2011**

The *Maitland Local Environmental Plan (LEP) 2011* is the overarching planning instrument applicable to the Maitland LGA.

Clause 5.10(2) (e) identifies that no buildings may be erected on land within a heritage conservation area or which contains an Aboriginal object, without first obtaining development consent. Further, Clause 5.10(2) (c) states that archaeological sites may not be disturbed or excavated without development consent. Exceptions to the requirement for development consent are detailed by Clause 5.10(3) and include low impact activities, or activities for the maintenance of a heritage item. Clause 5.10(8) requires that the effect of any development on an Aboriginal place of heritage significance must be considered, and the Aboriginal community must be notified of any proposed developments.

There are no heritage items, heritage conservation areas or archaeological sites identified on the LEP heritage maps within the study area.



## **1.6 MAITLAND DCP 2011**

The Maitland Development Control Plan 2011 (DCP) provides detailed planning requirements for developments within the Maitland LGA. Section C.4 – Heritage Conservation addresses heritage items within the Maitland LGA; however, the DCP does not specifically address Aboriginal heritage significance.

There are no historic heritage items within or adjacent to the study area however one item of heritage significance is located in close proximity. Owlpen House (188) is located south of the study area and the Owlpen House preliminary Heritage Curtilage buffer does not impact the current study area. The impacts on this item will be addressed in a separate Statement of Heritage Impact.

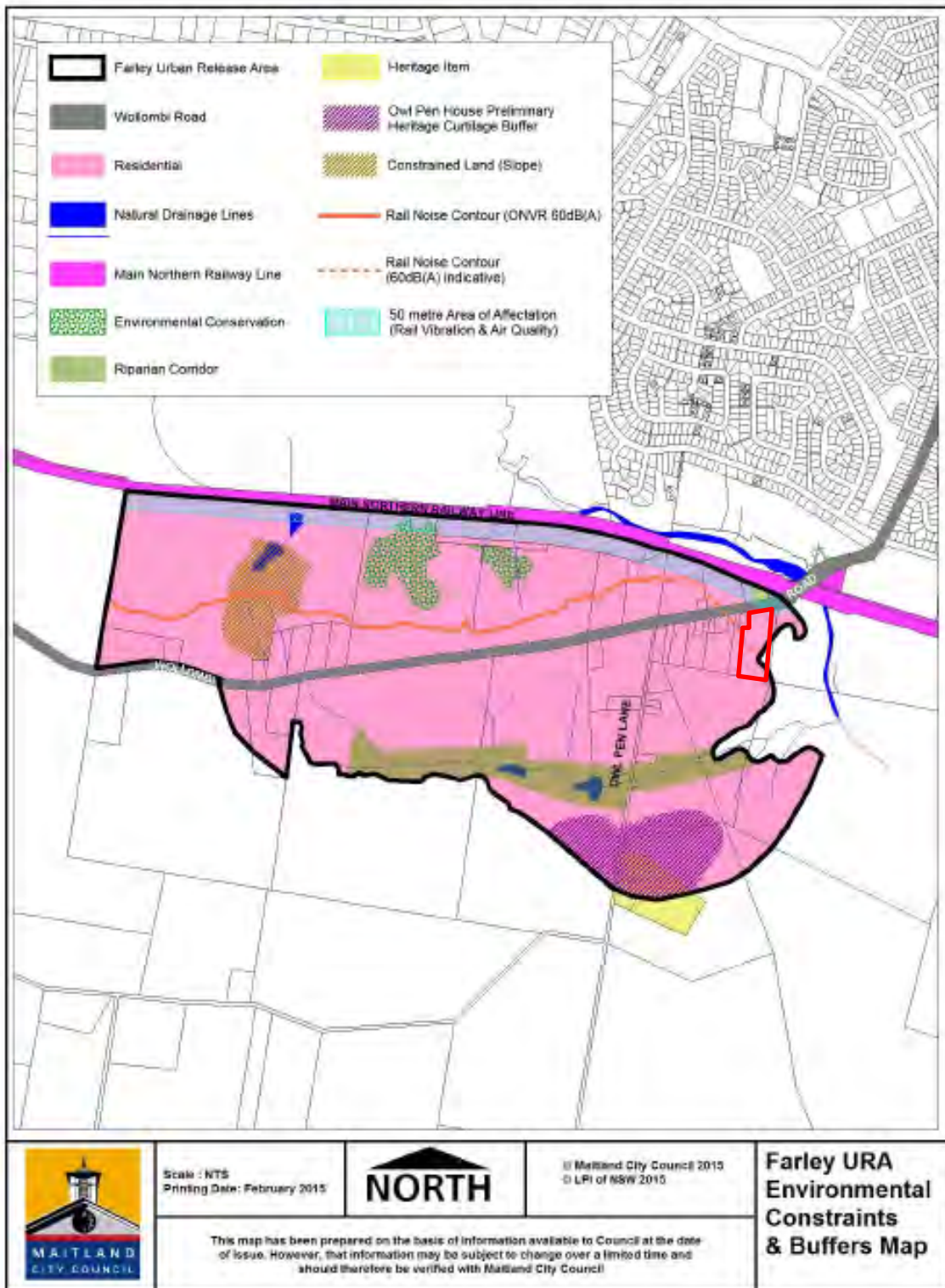


Figure 82: Farley URA Environmental Constraints and Buffers.

Figure 2: Environmental constraints and buffers map – Maitland DCP 2011 (Study area outlined in red).



## 2.0 THE DUE DILIGENCE CODE OF PRACTICE PROCESS

The Due Diligence Code of Practice provides a specific framework to guide the assessment of Aboriginal cultural heritage. The following section presents the results of this process.

### 2.1 STEP 1: WILL THE ACTIVITY DISTURB THE GROUND SURFACE?

The proposed works will disturb the ground surface. The study area is proposed to be subdivided to accommodate new residential dwellings along with the installation of services, including sewerage, electricity, town water, roads, and associated landscaping.

Excavation relating to the development will include infrastructure and levelling of the ground surface. Connection to town water supply, sewerage, and electricity will require trenching. Earthworks would also include clearing, grubbing, stripping and stockpiling topsoil, excavation of soil and backfilling. On completion of the development the area would be landscaped. All proposed works would have an impact to some extent on the ground surface.

### 2.2 STEP 2A: AHIMS AND AVAILABLE LITERATURE SEARCH

Heritage NSW is required to maintain a register of Aboriginal sites recorded during archaeological assessments and other activities within NSW. This is known as the Aboriginal Heritage Information Management System (AHIMS). This register provides information about site types, their geographical location, and their current status. It is the requirement for the recorder of a newly identified site to register this site with Heritage NSW to be placed onto the AHIMS register. It is a requirement of the Code of Practice to undertake a search of this register as part of undertaking a due diligence assessment.

Heritage NSW also maintains a register of archaeological reports relating to archaeological investigations throughout NSW. These reports are a valuable source of information regarding investigations previously completed and their findings, and can inform the assessment process regarding the potential for Aboriginal cultural material and archaeological potential within a study area.

#### 2.2.1 AHIMS RESULTS

A search of the study area using the Lot and DP of the property with a 50m buffer did not identify any registered sites. A copy of the Basic Search is attached in Appendix A. A wider search to identify previous assessments identified 79 registered sites within a 5km search box of the study area. A copy of the extensive search is attached in Appendix B.



**Table 1: AHIMS sites within a 5km search box of the study area**

Site ID	Site Name	Context	Recorders
38-4-0077	Farley; W;	Open site	Len Dyall
38-4-1173	FWW 1 (Maitland)	Open site	Ms. Gillian Goode, Mrs. Tessa Boer-Mah
38-4-1595	FWW2	Open site	Ms.Gillian Goode
37-6-0126	Bishop's Bridge; Farley;J;	Open site	Len Dyall
38-4-0834	Heritage Green 21/A (HG 21/A)	Open site	Mr.Peter Kuskie
38-4-0744	Heritage Green 8/A	Open site	Mr.Peter Kuskie
38-4-0734	Heritage Green17/E	Open site	Mr.Peter Kuskie
38-4-0742	Heritage Green 13/B	Open site	Mr.Peter Kuskie
38-4-0717	Heritage Green 17/A	Open site	Mr.Peter Kuskie
38-4-1641	Farley WWTW Artefact Burial	Open site	Mr.John Simpson
38-4-1617	RPS Farley WSEA 1	Open site	RPS East Australia Pty Ltd - Echuca Victoria,Mrs.Tessa Boer-Mah
38-4-1196	Rutherford Rail 2	Open site	South East Archaeology
38-4-1370	RPS Farley AS1	Open site	RPS Australia East Pty Ltd - Hamilton,Miss.Philippa Sokol
38-4-1376	Restriction applied. Please contact ahims@environment.nsw.gov.au.	Open site	Ms.Mary Dallas
38-4-1539	RPS SIMPSONS LN AS1	Open site	RPS East Australia Pty Ltd - Echuca Victoria
37-6-2248	Rutherford Rail 8	Open site	Mr.Peter Kuskie
38-4-0713	Heritage Green 23/G	Open site	Mr.Peter Kuskie
38-4-0730	Heritage Green 22/A	Open site	Mr.Peter Kuskie
38-4-0715	Heritage Green 15/A	Open site	Mr.Peter Kuskie
38-4-1283	RPS ASPAD01	Open site	RPS Australia East Pty Ltd - Blacktown,Ms.Laura Farquharson,Mrs.Tessa Boer-Mah
38-4-1192	Farley Investigation Area 1	Open site	MCH - McCardle Cultural Heritage Pty Ltd,RPS Australia East Pty Ltd - Hamilton,Ms.Jo Nelson
37-6-2245	Rutherford Rail 5	Open site	Mr.Peter Kuskie
38-4-0722	Heritage Green 17/D	Open site	Mr.Peter Kuskie
38-4-1935	Owlpen Lane East AS; PAD 1	Open site	RPS Australia East Pty Ltd - Hamilton,RPS Australia East Pty Ltd - Hamilton,Ms.Jo Nelson,Ms.Jo Nelson
38-4-1176	FWW 4 (Maitland)	Open site	Ms.Gillian Goode,Mrs.Tessa Boer-Mah
38-4-1785	Maitland 14 IA	Open site	Umwelt (Australia) Pty Limited - Individual users,Umwelt (Australia) Pty Limited - Individual users,Miss.Nicola Roche,Miss.Nicola Roche





Site ID	Site Name	Context	Recorders
38-4-1372	RPS Farley AS3	Open site	RPS Australia East Pty Ltd - Hamilton, Miss. Philippa Sokol
38-4-1018	GH Campsite 1	Open site	Mary Dallas Consulting Archaeologists (MDCA)
38-4-1019	GH PAD3	Open site	Mary Dallas Consulting Archaeologists (MDCA)
37-6-2249	Rutherford Rail 9	Open site	Mr. Peter Kuskie
38-4-0738	Heritage Green 23/C	Open site	Mr. Peter Kuskie
38-4-0740	Heritage Green 23/E	Open site	Mr. Peter Kuskie
38-4-0745	Heritage Green 7/A	Open site	Mr. Peter Kuskie
38-4-0741	Heritage Green 13/C	Open site	Mr. Peter Kuskie
38-4-0735	Heritage green 23/A	Open site	Mr. Peter Kuskie
38-4-0714	Heritage Green 24/A	Open site	Mr. Peter Kuskie
38-4-1138	GH PAD 1 (Berefield)	Open site	Mr. Paul Irish, Ms. Mary Dallas
38-4-2125	HN-FW-A01	Open site	Heritage Now - Belmont, Ms. Trishia Palconit
38-4-0732	Heritage Green 21/B	Open site	Mr. Peter Kuskie
38-4-1616	RPS Farley PAD011	Open site	RPS East Australia Pty Ltd - Echuca Victoria, Mrs. Tessa Boer-Mah
38-4-1932	Heritage Green IF 1	Closed site	Umwelt (Australia) Pty Limited - Individual users, Umwelt (Australia) Pty Limited - Individual users, Ms. Alison Lamond, Mrs. Amanda Crick
38-4-1006	Gillieston Heights 2	Open site	Umwelt (Australia) Pty Limited - Individual users, Ms. Amanda Reynolds
37-6-0128	Bishop's Bridge Farley Y	Open site	Len Dyll
38-4-0736	Heritage Green 23/B	Open site	Mr. Peter Kuskie
38-4-1174	FWW 2 (Maitland)	Open site	Ms. Gillian Goode, Mrs. Tessa Boer-Mah
38-4-1347	Lot 4 and 52 DP868890	Open site	RPS Australia East Pty Ltd - Hamilton, Miss. Philippa Sokol
38-4-1156	GHN 1 PAD	Open site	RPS Australia East Pty Ltd - Hamilton
38-4-1059	GH PAD 2	Open site	Ms. Mary Dallas
38-4-1374	FWW5	Open site	Ms. Gillian Goode, RPS Australia East Pty Ltd - Hamilton, Mrs. Tessa Boer-Mah
37-6-2246	Rutherford Rail 6	Open site	Mr. Peter Kuskie
38-4-0731	Heritage Green 17/E	Open site	Mr. Peter Kuskie
38-4-1947	GHWT1	Open site	Umwelt (Australia) Pty Limited - Individual users, Miss. Nicola Roche
38-4-1590	Farley Quarry IA02	Open site	Hunter Water Corporation - Newcastle
38-4-0708	Johnson Street 2	Open site	South East Archaeology
38-4-1373	RPS Farley IF1	Open site	RPS Australia East Pty Ltd - Hamilton, Miss. Philippa Sokol
38-4-1220	Rutherford Rail 10	Open site	Mr. Peter Kuskie



Site ID	Site Name	Context	Recorders
38-4-1193	Farley Investigation Area 2	Open site	MCH - McCardle Cultural Heritage Pty Ltd, RPS Australia East Pty Ltd - Hamilton, Ms. Jo Nelson
38-4-0719	Heritage Green 17/C	Open site	Mr. Peter Kuskie
38-4-1197	Rutherford Rail 3	Open site	South East Archaeology
38-4-0707	Johnson Street 1	Open site	South East Archaeology
37-6-0123	Bishop's Bridge Farley I	Open site	Len Dyll
37-6-0129	Bishop's Bridge; Farley; Z;	Open site	Len Dyll
38-4-0076	Farley;	Open site	Len Dyll
38-4-1175	FWW 3 (Maitland)	Open site	Ms. Gillian Goode, Mrs. Tessa Boer-Mah
37-6-0127	Bishop's Bridge; Farley; X;	Open site	Len Dyll
37-6-0120	Lochinvar; Farley; F;	Open site	Len Dyll
37-6-2247	Rutherford Rail 7	Open site	Mr. Peter Kuskie
38-4-0733	Heritage Green 19/A	Open site	Mr. Peter Kuskie
38-4-1194	Farley Investigation Area 3	Open site	MCH - McCardle Cultural Heritage Pty Ltd, RPS Australia East Pty Ltd - Hamilton, Ms. Jo Nelson
38-4-0729	Heritage Green 18A	Open site	Mr. Peter Kuskie
38-4-0737	Heritage Green 23/F	Open site	Mr. Peter Kuskie
38-4-0718	Heritage Green 17/B	Open site	Mr. Peter Kuskie
38-4-1371	RPS Farley AS2	Open site	RPS Australia East Pty Ltd - Hamilton, Miss. Philippa Sokol, Mr. John Simpson
38-4-1589	Farley Quarry AS01	Open site	Hunter Water Corporation - Newcastle
38-4-1039	GH PAD 1	Open site	Mary Dallas Consulting Archaeologists (MDCA), Paul Irish Consultant Archaeologist
37-6-0119	Lochinvar; Farley; E;	Open site	Len Dyll
38-4-1195	Rutherford Rail 1	Open site	South East Archaeology
38-4-0739	Heritage Green 23/D	Open site	Mr. Peter Kuskie
38-4-0747	Heritage Green 6/A	Open site	Mr. Peter Kuskie

The above table comprises 64 artefact sites, 10 potential archaeological deposit (PAD) sites, four grinding groove sites, two Aboriginal resource and gathering sites and one restricted site type. The majority of site occurrences are thus artefact scatters located throughout the local area.





### 2.2.2 LITERATURE REVIEW

A review of previous archaeological work within the wider area was undertaken and a number of reports were identified from background research and the AHIMS database and are detailed below.

Numerous archaeological investigations have been undertaken within the Newcastle region, some dating back to the 1980s.

Brayshaw surveyed an area within the holdings of Ironbark Colliery in 1985, with two open campsites identified with fewer than 20 artefacts identified. The site was located near the headwaters of Four Mile Creek.

Dean-Jones completed a survey in 1989 for the area located east of the current study area, with five open camp sites and one isolated find identified. All sites were identified within 50m of a drainage line.

In 1992, Barber undertook a survey for a proposed sub-division located in East Maitland along Three Mile Creek. Three isolated artefacts and one low density open camp site with four artefacts were identified.

Kuskie surveyed an area near the Thornton Industrial Area, in 1994. A total of ten sites were identified, comprising nine open sites and one isolated find. Additionally, an area of naturally occurring silcrete was identified. The site was later subject to test excavation by Kuskie, with grader scrapes completed at the location of each previously recorded site, and mechanically excavated trenches were also excavated, with a total of 1,234 artefacts recovered. A range of artefact types were identified, including cores, retouched flakes, flakes, and heat shatter. 82% of the items were formed from silcrete. It was noted that higher artefact densities were identified on simple and basal slopes surrounding wetlands, and that it was likely that local silcrete sources were utilised for the manufacture of artefacts.

In 1995, Ruig undertook an assessment for a proposed optic fibre route between East Maitland and Benwerrin. Two isolated finds were identified.

Rheinberger completed a survey in 1998 for Donaldson Open Cut Coal Mine, located to the south west of the current study area. Eleven sites were identified, comprising seven open camp sites, three isolated finds, and a scarred tree. The open camp sites contained fewer than five artefacts.

Also in 1998, Silcox prepared an assessment for an industrial estate approximately 13km south east of the current study area. One site was identified and archaeological excavation was undertaken, with nine 3m x 50cm trenches mechanically excavated, and 42 artefacts recovered. Artefact densities were assessed as between 1 and 11 items per pit, and included flakes, broken flakes and flaked pieces. 39 of the 42 items were formed on silcrete, and no cores were identified within the assemblage. It was concluded that knapping did not occur on



site (Silcox 1998b), and that the site was not suitable for camping. It was also concluded that the low density assemblage represented repeated use of the site, and opportunistic discard occurring during each of these visits over time.

Umwelt undertook an assessment for a commercial development in 1999, on the corner of the New England Highway and Chelmsford Drive. Four isolated artefacts were identified as part of the assessment.

In 2003, Stendinger Associates completed a survey of a 5 hectare lot just off Lord Howe Drive, Ashtonfield. No archaeological material was identified due to poor surface visibility.

Many of the recent archaeological investigations within the wider region have focussed on coal mining operations, particularly to the south of the study area with the Abel Underground Coal Mine and Bloomfield Collieries.

These investigations identified a range of Aboriginal cultural sites in various landforms. These included grinding groove sites, artefact scatters, isolated finds, scarred trees, and rockshelters with and without PAD. Most surface expressions of lithic items are low density (for example, at Bloomfield Colliery, six sites with 19 individual loci were identified across 108 hectares, with a total of 53 artefacts recorded [SEA 2008]).

RPS completed excavations in 2013 of two PAD sites located within Farley just north of the study area, on a mid slope to the south of a third-order tributary of Stony Creek and the other on the southern side of Wentworth Swamps, north of the Farley Waste Water Treatment Plant (Figure 4). Stony Creek had a deep archaeological deposit up to one metre in depth, from which 1,442 artefacts were recovered. Pits from Wentworth Swamp recovered 2,819 artefacts and here pits were shallower, often less than 30cm in depth.

More recently, RPS completed an Aboriginal due diligence assessment for Ravensfield Downs Pty Ltd at a proposed residential lot development at Farley. The Project Area extended approximately 2.8 kilometres along Wollombi Road, and approximately 2.0 kilometres east of Owlpen Lane, Farley, NSW. No Aboriginal artefacts were identified; however, five areas of subsurface archaeological potential were identified from analysis of the landform and archaeological information from surrounding areas.

RPS conducted further assessment and test excavation at Farley for Ravensfield Downs Pty Ltd in October 2017, following recommendations from the earlier Due Diligence Assessment. A total of 54 test pits were excavated and fifteen artefacts were found from seven of the pits comprising a low density artefact deposit. Six test pits were excavated along the unnamed creek line which runs through the property



directly to the south of the current study area. No artefacts were recovered from the test pits excavated within that area.

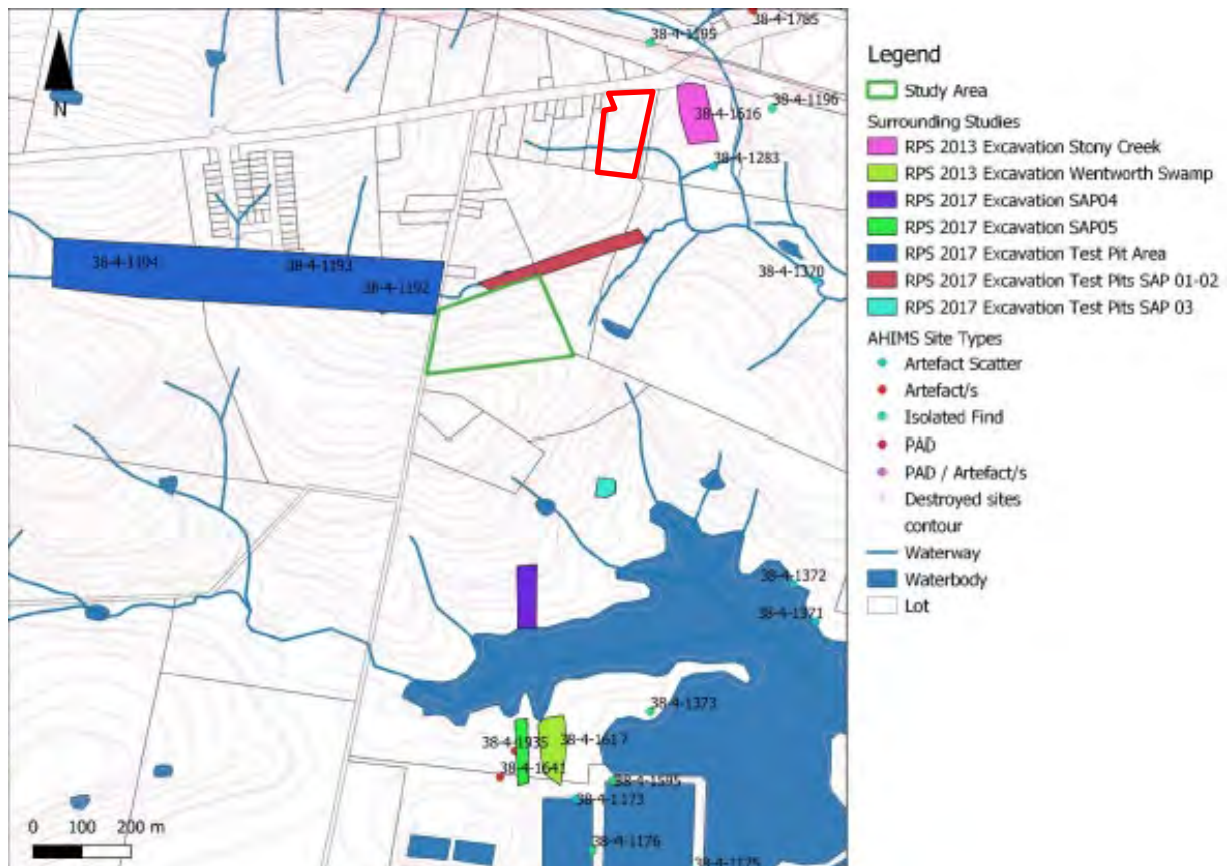


Figure 4: Surrounding archaeological investigations. Current study area outlined in red. (Source Heritage Now 2019).

Heritage Now completed an Aboriginal due diligence assessment for 59 Owlpen Lane, Farley in 2019. This property is located to the south west of the current study area. No artefacts were identified on the surface; however, an area of moderate potential archaeological deposit (PAD) was identified within the elevated ridge crest in the south-east portion of the property. A subsequent program of test excavation under the Code of Practice was completed in 2020. No artefacts were recovered from the test excavation.

## 2.3 STEP 2B: LANDSCAPE FEATURES

An assessment of landscape features is required to determine whether Aboriginal objects are likely to be present within the proposed activity area. Certain landscape features are more likely to have been utilised by Aboriginal people in the past and therefore are more likely to have retained archaeological evidence of this use. Focal areas of activity for Aboriginal people include rock shelters, sand dunes, water courses, waterholes and wetlands, as well as ridge lines for travel routes.



The presence of specific raw materials for artefact manufacture, as well as soil fertility levels to support vegetation resources, are also factors to be considered in the assessment of the environmental context of a study area. Geomorphological factors, such as erosion and accretion of soils, affect the preservation of potential archaeological deposits and therefore need to be considered when making an assessment of the potential for archaeological material to be present within a study area. This assessment is predominantly a desktop exercise.

### 2.3.1 EXISTING ENVIRONMENT

The study area is located within the East Maitland Hills physiographic region of the Newcastle region. This area is characterised by “predominantly undulating low hills on Permian sediments in the mid-west of the area” (Matthei 1995:2). The study area has been mostly cleared. Residential homes are located to the north and south.

#### HYDROLOGY

The nearest major permanent water source is the Hunter River which lies approximately 3km to the east of the study area. Stony Creek is located 230m east of the study area. An unnamed ephemeral drainage line runs directly through the study area. Stony Creek is defined as a second order water course according to the Strahler system as used by DPI Water (Figure 5). Watercourse classification ranges from first order through to fourth order (and above) with first order being the lowest, ie a minor creek or ephemeral watercourse and fourth or above being a large watercourse such as a river.

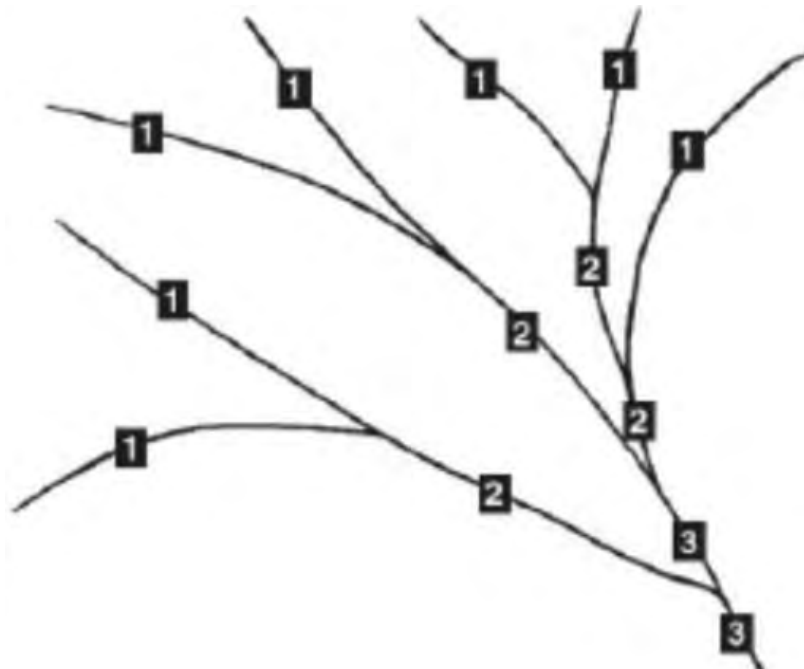


Figure 5: The Strahler system (Source: Department of Planning and Environment 2016).



## SOILS, GEOLOGY AND TOPOGRAPHY

The study area falls within the Bolwarra Heights soil landscape. The Bolwarra Heights soil landscape consists of rolling low hills with slopes ranging from 5–20%. Underlying geology for the area consists of predominantly the Branxton formation of the Maitland Group. This includes sandstone, siltstone and conglomerate with small areas of Muree Sandstone, conglomerate and siltstone and the Farley Formation which consists of sandstone, mudstone, siltstone and shale.

## VEGETATION

Prior to the arrival of European settlers, the vegetation of the area would have comprised predominantly of cleared tall open-forest. *Eucalyptus maculata* (spotted gum) is the most dominant species, with *E. fibrosa* (broad-leaved ironbark). *E. tereticornis* (forest red gum) occurs on some lower slopes. *Angophora floribunda* (rough-barked apple) and *Allocasuarina torulosa* (forest oak) may also occur, with *Casuarina glauca* (swamp oak) along drainage lines.

## 2.4 RAW MATERIALS

A wide range of raw materials were selected by Aboriginal people for flaking to create stone implements. Material types ranged from high quality to poor quality for flaking purposes, depending on the geology of the area and readily available material types. The following is a description of a range of raw material types known to have been utilised by Aboriginal people for the creation of stone artefacts.

### BRECCIA

Breccias are coarse, angular volcanic fragments cemented together by a finer grained tuffaceous matrix.

### CHALCEDONY

Chalcedony is a microcrystalline, siliceous rock which is very smooth and can be glossy. Introduction of impurities can produce different coloured versions of chalcedony, including yellow/brown (referred to as carnelian), brown (sard), jasper (red/burgundy) and multicoloured agate. It flakes with a sharp edge and was a prized material type for the creation of stone artefacts in parts of Australia (Kuskie & Kamminga 2000: 186).

### CHERT

Chert is a highly siliceous sedimentary rock, formed in marine sediments and also found within nodules of limestone. Accumulation of substances such as iron oxide during the formation process often results in banded materials with strong colours. Chert is found in the Illawarra Coal Measures and also as pebbles and colluvial gravels. It flakes with durable, sharp edges and can range in colour from cream to red to brown and grey.





### **PETRIFIED WOOD**

Petrified wood is formed following burial of dead wood by sediment and the original wood being replaced by silica. Petrified wood is a type of chert and is a brown and grey banded rock and fractures irregularly along the original grain.

### **QUARTZ**

Pure quartz is formed of silicon dioxide, and has a glossy texture and is translucent. Introduction of traces of minerals can lead to colouration of the quartz, such as pink, grey or yellow. The crystalline nature of quartz allows for minute vacuoles to fill with gas or liquid, giving the material a milky appearance. Often quartz exhibits internal flaws which can affect the flaking quality of the material, meaning that in general it is a low-quality flaking material (Kuskie & Kamminga 2000: 186). However, quartz is an abundant and widely available material type and therefore is one of the most common raw materials used for artefact manufacture in Australia. Flaking of quartz can produce small, very sharp flakes which can be used for activities such as cutting plant materials, butchering and skinning.

### **QUARTZITE**

Formed from sandstone, quartzite is a metamorphic stone high in silica that has been heated or had silica infiltrate the voids found between the sand grains. Quartzite ranges in colour from grey to yellow and brown.

### **SILCRETE**

Silcrete is a siliceous material formed by the cementing of quartz clasts with a matrix. These clasts may be very fine grained to quite large. It ranges in colour from grey to white, brown, red or yellow. Silcrete flakes with sharp edges and is quite durable, making silcrete suitable for use in heavy duty woodworking activities and also for spear barbs (Kuskie & Kamminga 2000:184).

### **TUFF/INDURATED MUDSTONE**

There is some disagreement relating to the identification of lithic materials as tuff or indurated mudstone. The material is a finely textured, very hard yellow/orange/reddish-brown or grey rock. Kuskie and Kamminga (2000: 6, 180) describe that identification of lithic materials followed the classification developed by Hughes (1984), with indurated mudstone described as a common stone material in the area. However, Kuskie and Kamminga's analysis, which included x-ray diffraction, identified that lithics identified as 'indurated mudstone' was actually rhyolitic tuff, with significant differences in mineral composition and fracture mechanics between the stone types. They define mudstone as rocks formed from more than 50% clay and silt with very fine grain sizes and then hardened.

The lithification of these mudstones results in shale (Kuskie & Kamminga 2000: 181) and thus 'indurated mudstone', in the opinion of Kuskie and Kamminga, do not produce stones with the properties required for lithic manufacture.



In 2011, Hughes, Hiscock and Watchman undertook an assessment of the different types of stones to determine whether tuff or indurated mudstone is the most appropriate terminology for describing this lithic material. The authors undertook thin section studies of a number of rocks and determined that the term 'indurated mudstone' is appropriate, with an acknowledgment that some of this material may have been volcanic in origin. They also acknowledge that precise interpretation of the differences between material types is difficult without detailed petrological examination, and suggest that artefacts produced on this material are labelled as 'IMT' or 'indurated mudstone/tuff'.

### **BASALT**

Basalt, which is commonly referred to as 'blue metal', is solidified lava that was produced by now extinct volcanoes and diatremes that are spread-out within the Sydney Basin. If the lava cools quickly it results in fine-grained basalt that is easily flaked or ground to make tools, implements or weapons. Tuff forms from the tiny ash particles that are also released during volcanic explosions. When it cools it hardens into a fine-grained rock called 'tuff', as discussed above.

Basalt would have been either collected from the primary deposits formed during the eruption, which would require pieces to be broken off (quarried) or it was collected in cobble-form from a creek bed or shoreline. Cobbles are referred to as secondary sources as they are formed from pieces of rock that have been dislodged from their primary source and end up in creeks and/or river systems (Petrequin 2016; Attenbrow et al. 2017). The flow of water moves them around and smooths them into water-rolled cobbles that can be transported considerable distance from the original source. Basalt was often used to make axes which were either flaked into the desired shape from quarried stone, or from cobbles which quite often only required only one end to be ground into a sharp working edge.

Basalt cobbles can be found along the banks of rivers, and in bedrock quarries within the Hunter Region. Recent research undertaken by the Australian Museum and University of New England using portable XRF technology demonstrated that a number of stone axes held at the Australian Museum from the Hunter Valley area have been traced to these sources (Attenbrow et al. 2017).

#### **2.4.1 PROCUREMENT**

Assemblage characteristics are related to and dependent on the distance of the knapping site from raw materials for artefact manufacture, and different material types were better suited for certain tasks than other material types. Considerations such as social or territorial limitations or restrictions on access to raw material sources, movement of groups across the landscape and knowledge of source locations can influence the procurement behaviour of Aboriginal people. Raw materials may also have been used for trade or special exchange between different tribes.



### 2.4.2 MANUFACTURE

A range of methodologies were used in the manufacture of stone artefacts and tools, through the reduction of a stone source. Stone may have been sourced from river gravels, rock outcrops, or opportunistic cobble selection. Hiscock (1988:36-40) suggests artefact manufacture comprises six stages, as follows:

1. The initial reduction of a selected stone material may have occurred at the initial source location, or once the stone had been transported to the site.
2. The initial reduction phase produced large flakes which were relatively thick and contained high percentages of cortex. Generally, the blows were struck by direct percussion and would often take advantage of prominent natural ridges in the source material.
3. Some of these initial flakes would be selected for further reduction. Generally, only larger flakes with a weight greater than 13-15 grams would be selected for further flaking activities.
4. Beginning of 'tranchet reduction', whereby the ventral surface of a larger flake was struck to remove smaller flakes from the dorsal surface, with this retouch applied to the lateral margins to create potential platforms, and to the distal and proximal ends to create ridges and remove any unwanted mass. These steps were alternated during further reduction of the flake.
5. Flakes were selected for further working in the form of backing.
6. Suitable flakes such as microblades were retouched along a thick margin opposite the chord to create a backed blade.

Hiscock (1986) proposed that working of stone materials followed a production line style of working, with initial reduction of cores to produce large flakes, followed by heat treatment of suitable flakes before the commencement of tranchet reduction. These steps did not necessarily have to occur at the same physical location, but instead may have been undertaken as the opportunity presented.

## 2.5 ETHNOHISTORY

Aboriginal society was constructed of a hierarchy of social levels and groups, with fluid boundaries (Peterson 1976), with the smallest group comprising a family of a man and his wife/wives, children and some grandparents, referred to as a 'clan' (Attenbrow 2010). The next level consists of bands, which were small groups of several families who worked together for hunting and gathering purposes, also known as a 'band' (Attenbrow 2010). The third level comprised regional networks with a number of bands, and these bands generally shared a common language dialect and/or had a belief in a common ancestor. Networks would come together for specific ceremonial purposes. The highest level is described as a tribe, which is usually described as a linguistic unit with flexible territorial boundaries (Peterson 1976); although Attenbrow (2010) argues that "these groups were not tribes in the current anthropological sense of the word".



The study area falls within the territory of the Awabakal people (Tindale 1974). The Awabakal territory is described as extending south from the Hunter River to Wyong and Norah Head, and inland west to Kurri Kurri and Maitland. The Awabakal are considered by some to be a sub-group of the Wonnarua people, with the Wonnarua boundaries extending to the ocean and past Wyong. Tindale (1974) considered them to be a separate tribe. Boundaries between tribes were considered fluid and it may not be possible to definitively define these boundaries.

The traditional lifestyles of Aboriginal groups such as the Awabakal depended largely on the environment in which they lived. The diet of Aboriginal people varied depending on the resources that were available to them and which were related to the landscape in which people lived. The Farley area would likely have had open woodlands prior to the arrival of colonists, and these would have supported a range of resources for food, medicine, and everyday living.

Threlkeld, a missionary from England who arrived in Australia in 1817, established an Aboriginal mission near Lake Macquarie just outside Newcastle. He recorded much of what he observed of Aboriginal people, particularly the Awaba. This included the consumption of wild plums, lizards, goanna, snakes, cockles, beached whales, crayfish, kangaroo, swans, pigeons, geese, wild ducks, and fish. Small macropods such as bandicoots and possums were also hunted, with their skins used for clothing and sewn together to create shelters, and their meat cooked for food. Fish were also cooked and small fires were kindled on top of clay within canoes while fishing was occurring. Threlkeld recorded details of the manner in which fishing was undertaken, as shown in the following quote:

“Their mode of fishing is curious, sometimes angling with hook and line thrown by the hand as they are seated in the bark canoe, sometimes diving for shell fish, sometimes standing in their frail bark darting their spears into the fish as they pass, or at other times using hand nets forming a circle in shallow waters and enclosing the fish, but the most curious method is that of planting sprigs of bushes in a zig-zag form across the streams leaving an interval at the point of every angle where the men stand with their nets to catch what others frighten towards them by splashing in water.” (Threlkeld in Gunson 1974:190).

Swamps and marshes were also rich resource zones, with people digging roots and bulbs for consumption. The roots were roasted and then “beat[en] with a stone upon a larger one, when they use it for bread” (Threlkeld in Gunson 1974:55).

Access to fresh water was an important consideration for the Aboriginal people of the Farley region. A tributary of Stony Creek is located within the study area, but was likely ephemeral in nature. The closest permanent water source was likely Swamp Creek, located approximately 1km east of the study area.



The different environments of the Farley area contain a diverse range of plant and animal species. On creek banks and surrounds, a wide variety of game would have been found. The vegetation communities along the creeks and gullies, primarily woodlands, would have provided shelter for numerous animal and plant species that could be eaten or used for other purposes such as providing shelter and medicines.

## 2.6 REGIONAL CONTEXT

The archaeological work previously completed within the wider region is summarised here.

The study area is located within the Newcastle Region. Many archaeological assessments have been completed within this region, including a range of academic assessments, resource management studies and development impact assessments. All of these assist in informing the archaeological assessment of sites within the region.

Generally, the arrival of humans within Australia is considered to have occurred around 43-45 ka (O'Connell & Allen 2004; McDonald 2008). However, recent work at the Madjedbebe site in Arnhem Land in the Northern Territory revealed archaeological evidence confidently dated to the period before 45-46 ka and possibly up to 50-55 ka (Clarkson et al 2015). In NSW, there is strong evidence available to support Aboriginal occupation of the Cumberland Plain region in the Pleistocene period (approximately 10 ka) and likely earlier. Work in Cranebrook Terrace was dated to 41,700 years BCE by Stockton and Holland (1974), and a site in Parramatta within deep sandy deposits was dated to 25-30 ka (JMcDCHM 2005). Kohen's 1984 assessment of Shaws Creek in the Blue Mountain foothills yielded dates of 13 ka, while Loggers Shelter at Mangrove Creek was dated to 11 ka by Attenbrow 1987. These dates are obtained from both radiocarbon and optically stimulated luminescence (OSL) dating.

Some experts have cast doubt onto the assessment of the items from Cranebrook Terrace as artefactual (Mulvaney & Kamminga 1999; McDonald 2008), although they do not doubt the results of the radiocarbon dates – it is the association of the artefacts with the dated deposits is problematic, and Mulvaney and Kamminga (1999) consider that there are better examples of sites with more robust identification of age available. There has certainly been a great deal of research undertaken within NSW and Australia in general in the intervening years.

As part of the many archaeological investigations undertaken within NSW, over 5,000 archaeological sites have been recorded and registered on the HNSW Aboriginal Heritage Information System (AHIMS). In general, the dominant site types identified within the Newcastle region include rock shelters with archaeological deposit (including middens), rock shelters with art, pictographs (rock engravings), artefact concentrations in open contexts, grinding grooves and open middens. The nature



and extent of individual sites is closely related to the environmental context in which they are found – for example, rockshelters are found within sandstone escarpments, while middens are generally located close to water bodies including marine, estuarine and freshwater contexts, and grinding grooves are found on flat sandstone platforms in close proximity to water sources.

## 2.7 PREDICTIVE MODEL

Based on the results of previous archaeological investigations within the wider region, a number of predictions regarding Aboriginal use of the area can be made. These predictions focus on the nature, extent and integrity of the remaining evidence.

The landscape characteristics of the area influence the prediction of the nature of potential sites within the landscape itself. Site types associated with sandstone country, such as grinding grooves, rock art sites, petroglyph (rock engravings) and sandstone rockshelters with art and/or archaeological deposit are not considered likely to occur within the study area. Scarred trees are also considered unlikely within the study area due to the high levels of historical clearing which have occurred within the landscape.

Disturbance is the predominant factor determining whether or not artefacts are likely to be identified within a landscape.

Surface sites are likely to have been impacted by agricultural processes within the area over the historic period. Natural actions such as bioturbation are likely to have impacted at least the upper levels of archaeological deposits, as are cultural activities such as excavation, construction, demolition ploughing, clearing and planting. Whilst these actions may impact the integrity of stratigraphy within the deposit, this does not necessarily mean associated archaeological objects will also be disturbed.

The site has been disturbed through the construction of the school and facilities such as playing fields. Historical clearing has led to erosion across much of the site and in some areas, soils are skeletal and subsurface archaeological material which may have once been present is unlikely to have survived.

In general, Aboriginal use of an area is based on a number of factors, such as:

- Proximity to permanent water sources – generally permanent or areas of repeat habitation are located within approximately 200m of permanent water;
- Proximity to ephemeral water sources – generally sites near ephemeral water sources were utilised for one-off occupation;
- Ease of travel – ridgelines were often utilised for travel during subsistence activities; and



- The local relief – flatter, more level areas were more likely to be utilised for long term or repeat habitation sites than areas of greater relief, especially if the slopes are at a distance from water.

In terms of the study area, sites are considered more likely to comprise:

- Isolated finds, which may occur anywhere across a landscape; and
- Open sites, in areas of low relief in close proximity to ephemeral or permanent water sources.

## **2.8 STEP 3: AVOID HARM**

Given the result of previous studies within the area, it was considered necessary to undertake a visual inspection of the land parcel to identify any surface objects or landforms with potential archaeological deposits (PAD). This inspection would allow conclusions to be made regarding the probability of archaeological objects occurring within the proposed development areas. This would assist in determining if there was any archaeological potential within the study areas which could potentially be harmed by the proposed works, and in turn, assist in determining if harm to the archaeological resource could be avoided.

The proposed development would impact the entirety of the study area, either through construction of internal access roads, associated infrastructure, or landscaping works. As such, it would not be possible to avoid impact to Aboriginal cultural values within the study area, should such exist. As such, a visual inspection of the site was undertaken to confirm if any such values exist within the study area.

## **2.9 STEP 4: VISUAL INSPECTION**

A visual pedestrian inspection of the study area was undertaken in August of 2022 by Leigh Bate, Archaeologist with Apex Archaeology.

### **2.9.1 SURVEY COVERAGE**

The entire area was inspected by pedestrian survey to identify any surface artefacts or any areas with potential for intact subsurface deposits to be present.

### **2.9.2 RESULTS**

A thorough inspection of the area was undertaken. Ground surface visibility (GSV) was low throughout the study area. GSV was rated at <10% overall. No raw material sources were identified within the study area. Several small outcrops of sandstone were observed within the central portion of the study area around the eastern side of the dam and each exposure was checked for evidence of grinding grooves or petroglyphs. The friable nature of the outcrop surface however precluded any archaeological evidence from being identified. It is highly likely that these exposures were not utilised for such sites.



Ground disturbance was moderate within portions of the study area due to historic vegetation clearance, agricultural activity, subsequent residential development and landscaping along with landscape modification. Disturbance was less noticeable within the southern portion of the study area along the upper slope and crest. Given the previous test excavation undertaken directly south of this area long a similar unnamed ephemeral drainage line and the current assessment of this area, it was considered as having no potential for subsurface archaeological deposits to occur.

The level of disturbance within the site from prior land clearing activities and current land use is evident. Landscape modification has reduced the potential for any intact archaeological sub-surface deposits within the study area to nil along with the general slope of the remainder of the site not being attractive for Aboriginal occupation in the past.



Plate 1: Looking north west at the main residence within the property.





Plate 2: Looking south across the western portion of the property.



Plate 3: Looking south across the study area.



Plate 4: Looking north east across the northern portion of the study area.



Plate 5: Looking south over the modified drainage line and dam within the central portion of the study area.



Plate 6: Looking south over the sandstone outcrop within the central portion of the site.



Plate 7: Looking west from south eastern corner of the site.



Plate 8: Looking along the eastern boundary of the site.



Plate 9: Looking west along the northern boundary of the site.



## 2.10 DISCUSSION

In accordance with the Due Diligence Code of Practice, land is considered disturbed if human activities within the area have left clear and observable changes on the landscape.

While ploughing and clearance has occurred in many areas of NSW, this has been shown to only affect the deposit up to 30-40cm deep, and even then, ploughed knapping floors have been located which are still relatively intact (McDonald 1998; Gaynor 2008). The area has been cleared and partially developed along with farming activities.

The level of disturbance from subsequent land clearing and landscape modification activities relating to the land use of the property means that the likelihood of subsurface archaeological deposits being located within the area are low, along with the general slope of the site not being an attractive area for past Aboriginal occupation. There were no expressions of artefact occurrences throughout the area on the surface or within any of the exposed soil profiles or erosional areas. Previous test excavation of the same landform within the property to the south of the study area demonstrate this area does not comprise artefact bearing deposits. As such, the sub-surface potential for the area is also determined as nil.



## 3.0 CONCLUSIONS AND RECOMMENDATIONS

### 3.1 CONCLUSIONS

- No previously registered Aboriginal sites are located within the study area.
- No archaeological material was identified on the ground surface of the study area.
- The study area was assessed as being moderately disturbed due to past land use practices.
- The study area was assessed as having no sub-surface archaeological potential, based on the results of the visual pedestrian inspection and previously completed test excavations adjacent to the study area.
- This assessment was based on identification of landform elements, previous archaeological work undertaken within the wider region, and a visual inspection of the study area.

### 3.2 RECOMMENDATIONS

- No further Aboriginal archaeological assessment is required prior to the commencement of works as described in this report.
- This due diligence assessment must be kept by the Bathla Group so that it can be presented, if needed, as a defence from prosecution under Section 86(2) of the *National Parks and Wildlife Act 1974*.
- The results of this assessment fulfil the requirement for archaeological assessment in accordance with the OEH 2010 *Guide to Investigation, assessing and reporting on Aboriginal cultural heritage in NSW* and the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (Code of Practice). Works may proceed with caution.
- The proposed works must be contained to the area assessed during this archaeological assessment, as shown on Figure 1. If the proposed location is amended, further archaeological assessment may be necessary to determine if the proposed works will impact any Aboriginal objects or archaeological deposits.
- Should unanticipated archaeological material be encountered during site works, all work must cease and an archaeologist contacted to make an assessment of the find. Further archaeological assessment and Aboriginal community consultation may be required prior to the recommencement of works. Any objects confirmed to be Aboriginal in origin must be reported to Heritage NSW.



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## **APPENDIX A: AHIMS SEARCH RESULTS**

Apex Archaeology  
PO BOX 236  
Nowra New South Wales 2541  
Attention: Leigh Bate

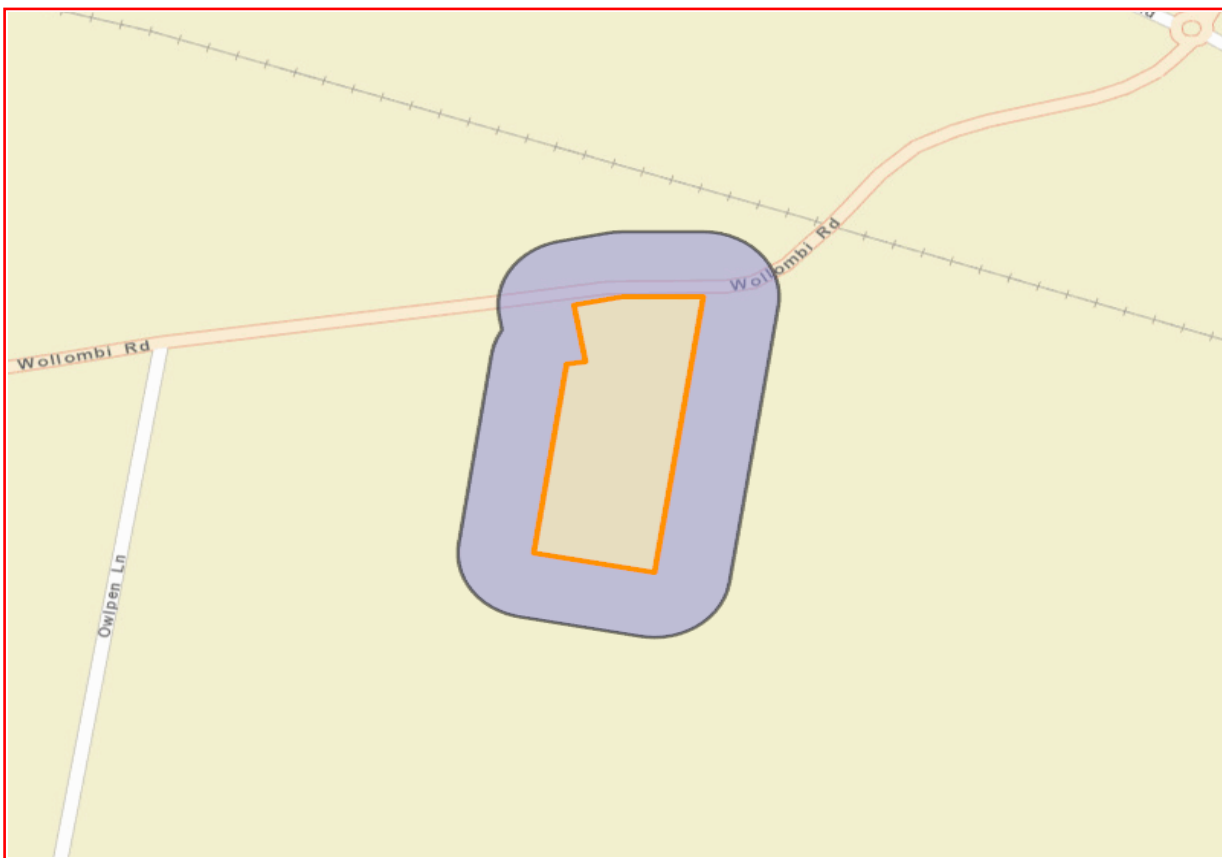
Date: 11 July 2022

Email: leigh@apexarchaeology.com.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 1, DP:DP1049391, Section : - with a Buffer of 50 meters, conducted by Leigh Bate on 11 July 2022.**

**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 Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

<b>0</b>	<b>Aboriginal sites are recorded in or near the above location.</b>
<b>0</b>	<b>Aboriginal places have been declared in or near the above location. *</b>

### **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 \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW 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 to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW 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.